Author Index to Volume 247
January–March 1990

Publisher: Richard S. Nicholson

Editor: Daniel E. Koshland, Jr.

Deputy Editors

Philip H. Abelson (*Engineering and Applied Sciences*)
John I. Brauman (*Physical Sciences*)

Editorial Board

Elizabeth E. Bailey
David Baltimore
William F. Brinkman
E. Margaret Burbidge
Pierre-Gilles de Gennes
Joseph L. Goldstein
Mary L. Good
F. Clark Howell
James D. Idol, Jr.
Leon Knopoff
Oliver E. Nelson
Yasutomi Nishizuka
Helen M. Ranney
David M. Raup
Howard A. Schneiderman
Larry L. Smarr
Robert M. Solow
James D. Watson

Board of Reviewing Editors

John Abelson
Don L. Anderson
Stephen J. Benkovic
Gunter K.-J. Blobel
Floyd E. Bloom
Henry R. Bourne
James J. Bull
Kathryn Calame
Charles R. Cantor
Ralph J. Cicerone
John M. Coffin
Robert Dorfman
Bruce F. Eldridge
Paul T. Englund
Fredric S. Fay
Theodore H. Geballe
Roger I. M. Glass
Stephen P. Goff
Corey S. Goodman
Stephen J. Gould
Eric F. Johnson
Steven M. Kosslyn
Konrad B. Krauskopf
Charles S. Levings III
Richard Losick
Joseph B. Martin
John C. McGiff
Anthony R. Means
Mortimer Mishkin
Roger A. Nicoll
Carl O. Pabo
Yeshayau Pocker
Dennis A. Powers
Erkki Ruoslahti
Thomas W. Schoener
Ronald H. Schwartz
Terrence J. Sejnowski
Robert T. N. Tjian
Virginia Trimble
Emil Unanue
Geerat J. Vermeij
Bert Vogelstein
Harold Weintraub
Irving L. Weissman
Zena Werb
George M. Whitesides
Owen N. Witte
William B. Wood

Published by the

American Association for the Advancement of Science

1333 H Street, NW, Washington, DC 20005

Printed in Waseca, Minnesota, by Brown Printing Company
Copyright 1990 by the American Association for the Advancement of Science

Author Index to Volume 247
January–March 1990

A–B

Aaron, Henry and Schwartz, William B.: Rationing health care: the choice before us. p418 26 Jan 1990.

Abelson, Philip H. (editorials): The asbestos removal fiasco. p1017 2 Mar 1990. Medicine from plants. p513 2 Feb 1990. Support for materials science and engineering. p1273 16 Mar 1990. Uncertainties about global warming. p1529 30 Mar 1990. Volatile contaminants of drinking water. p141 12 Jan 1990.

AbuBakar, Sazaly. *See* Boldogh, Istran.

Ackerman, T. P. *See* Turco, R. P.

Acsadi, Gyula. *See* Wolff, Jon A.

Adachi, Takashi. *See* Kawakami, Atsushi.

Adams, Paul R. *See* Hernández-Cruz, Arturo.

Adams, Robert J.: Methanol-powered cars (letter). p394 26 Jan 1990.

Adler, Michael J. *See* Solomon, Barry D.

Aggarwal, Aneel K. *See* Pabo, Carl O.

Aguilar, Barbara A. *See* Chandy, K. George.

Albertini, Richard J. *See* Allegretta, Mark.

Albrecht, Thomas. *See* Boldogh, Istran.

Alkon, Daniel L. *See* Nelson, Thomas J.

Allan, Jonathan S.; Strauss, Janet; Buck, David W.: Enhancement of SIV infection with soluble receptor molecules. p1084 2 Mar 1990.

Allegretta, Mark; Nicklas, Janice A.; Sriram, Subramaniam; Albertini, Richard J.: T cells responsive to myelin basic protein in patients with multiple sclerosis. p718 9 Feb 1990.

Allen, H. L. and Iversen, L. L.: Phencyclidine, dizocilpine, and cerebrocortical neurons (technical comment). p221 12 Jan 1990.

Allison, M.; Godrey, D. A.; Beebe, R. F.: A wave dynamical interpretation of Saturn's polar hexagon. p1061 2 Mar 1990.

Alper, Joseph (news): The microchip microbe hunters. p804 16 Feb 1990.

Altman, A. *See* Mustelin, T.

Amarnath, Kalyani. *See* Arnett, Edward M.

Ambros-Ingerson, José; Granger, Richard; Lynch, Gary: Simulation of paleocortex performs hierarchical clustering. p1344 16 Mar 1990.

Amoroso, Salvatore; Schmid-Antomarchi, Heidy; Fosset, Michel; Lazdunski, Michel: Glucose, sulfonylureas, and neurotransmitter release: role of ATP-sensitive K^+ channels. p852 16 Feb 1990.

Anderson, Leon. *See* Snow, David A.

Anderson, Matthew P. *See* Welsh, Michael J.

Annab, Lois A. *See* Sugawara, Osamu.

Appenzeller, Tim (news): Democratizing the DNA sequence. p1030 2 Mar 1990.

Arai, Ken-ichi. *See* Itoh, Naoto.

Araujo, Diana E. *See* Trent, Jeffrey M.

Argote, Linda and Epple, Dennis: Learning curves in manufacturing. p920 23 Feb 1990.

Arnett, Edward M.; Amarnath, Kalyani; Harvey, Noel G.; Cheng, J. P.: Chemical bond-making, bond-breaking, and electron transfer in solution. p423 26 Jan 1990.

Asakura, Toshio. *See* Ryan, Thomas M.

Astumian, R. Dean. *See* Weaver, James C.

Auerbach, Stanley I. *See* Fulkerson, William.

Auld, Vanessa J. *See* Scheuer, Todd.

Ayer–Le Lievre, Christiane. *See* Persson, Håkan.

Bach, Montserrat. *See* Heinrichs, Volker.

Bakun, Andrew: Global climate change and intensification of coastal ocean upwelling. p198 12 Jan 1990.

Baldassare, Joseph J. *See* Goldschmidt-Clermont, Pascal J.

Baliunas, Sallie L.: Global warming report (letter). p15 5 Jan 1990. *See also* Radick, Richard R.

Ballard, Barry T. *See* Helmann, John D.

Ballaré, Carlos L.; Scopel, Ana L.; Sánchez, Rodolfo A.: Far-red radiation reflected from adjacent leaves: an early signal of competition in plant canopies. p329 19 Jan 1990.

Ballester, Roymarie. *See* Field, Jeffrey.

Baltimore, David. *See* Daley, George Q.

Bandeira, Antonio. *See* Salaün, Josselyne.

Barinaga, Marcia (news): Amino acids: how much excitement is too much? p20 5 Jan 1990. Biotechnology on the auction block. p906 23 Feb 1990. Entomologists in the medfly maelstrom. p1168 9 Mar 1990. Fish, money, and science in Puget Sound. p631 9 Feb 1990. MSG: a 20-year debate continues. p21 5 Jan 1990. Neuroscience models the brain. p524 2 Feb 1990. Quick fix for freeways. p31 5 Jan 1990. Where have all the froggies gone? p1033 2 Mar 1990.

Barnett, B. D. *See* Van Rie, J.

Barrett, J. Carl. *See* Sugawara, Osamu.

Batina, Nikola. *See* Frank, Douglas G.

Bauer, Susan I. *See* Maione, Theodore E.

Beach, Larry. *See* Ludwig, Steven R.

Beamer, Lesa J. *See* Pabo, Carl O.

Beebe, R. F. *See* Allison, M.

Behringer, Richard R. *See* Ryan, Thomas M.

Bell, Richard C.: Molecule of the year (letter). p905 23 Feb 1990.

Bell, Robert M. *See* Ellickson, Phyllis L.

Belluscio, Leonardo. *See* Maisonpierre, Peter C.

Bennink, Jack R. *See* Cox, Josephine H.

Benson, Kathleen F. *See* Xiang, Xin.

Berman, Stephen A.; Bursztajn, Sherry; Bowen, Barbara; Gilbert, Walter: Localization of an acetylcholine receptor intron to the nuclear membrane. p212 12 Jan 1990.

Berndt, Michael C. *See* Newman, Peter J.

Bernengo, Jean-Claude. *See* Picard, André.

Besmer, Peter. *See* Tan, Jimmy C.

Bestland, E. A. *See* Retallack, Gregory J.

Bignon, J. *See* Mossman, B. T.

Bill, Jerome. *See* Woodland, David.

Bivens, Lyle W. *See* Mason, James O.

Björklund, Anders. *See* Lindvall, Olle.

Blachly-Dyson, Elizabeth; Peng, Songzhi; Colombini, Marco; Forte, Michael: Selectivity changes in site-directed mutants of the VDAC ion channel: structural implications. p1233 9 Mar 1990.

Blackburn, Elizabeth H. *See* Shippen-Lentz, Dorothy.

Block, Melodye L. and Moody, William J.: A voltage-dependent chloride current linked to the cell cycle in ascidian embryos. p1090 2 Mar 1990.

Boldogh, Istran; AbuBakar, Sazaly; Albrecht, Thomas: Activation of proto-oncogenes: an immediate early event in human cytomegalovirus infection. p561 2 Feb 1990.

Boniface, J. Jay and Reichert, Leo E., Jr.: Evidence for a novel thioredoxin-like catalytic property of gonadotropic hormones. p61 5 Jan 1990.

Bonifacino, Juan S.; Suzuki, Carolyn K.; Klausner, Richard D.: A peptide sequence confers retention and rapid degradation in the endoplasmic reticulum. p79 5 Jan 1990.

Bookstein, Robert; Shew, Jin-Yuh; Chen, Phang-Lang; Scully, Peter; Lee, Wen-Hwa: Suppression of tumorigenicity of human prostate carcinoma cells by replacing a mutated *RB* gene. p712 9 Feb 1990.

Boothby, Mark R. *See* Liou, Hsiou-Chi.

Bowen, Barbara. *See* Berman, Stephen A.

Bowen, Ben. *See* Ludwig, Steven R.

Bower, Gordon H. and Morrow, Daniel G.: Mental models in narrative comprehension. p44 5 Jan 1990.

Bowie, James U.; Reidhaar-Olson, John F.; Lim, Wendell A.; Sauer, Robert T.: Deciphering the messages in protein sequences: tolerance to amino acid substitutions. p1306 16 Mar 1990.

Boyd, Shelley. *See* Scheuer, Todd.

Bradley, Daniel W. *See* Reyes, Gregory R.

Bradley, James W. *See* Sempowski, Martha L.

Branlant, Christiane. *See* Myslinski, Evelyne.

Brauman, John I.: New materials: chemistry and physics (editorial). p613 9 Feb 1990.

Bravman, J. *See* Sun, J. Z.

Brent, Robert L. *See* Miller, Robert W.

Breunger, E. *See* Rilling, H. C.

Brewer, Peter G.: review of *Productivity of the Ocean*, edited by W. H. Berger, V. S. Smetacek, and G. Wefer. p865 16 Feb 1990.

Briefings (news): Activists urge ban on herbicide R&D. p1539 30 Mar 1990. Africanized bees near Texas border. p284 19 Jan 1990. Alps threatened with deforestation. p811 16 Feb 1990. Americans capture more math degrees. p25 5 Jan 1990. Animal rightists threaten researcher. p407 26 Jan 1990. Anxiety in academe over DOD cuts. p530 2 Feb 1990. Asian-American to lead Berkeley. p1036 2 Mar 1990. Asians up, Africans down. p157 12 Jan 1990. Better numbers on primate research. p1539 30 Mar 1990. A big bird in the sky for scientists? p1415 23 Mar 1990. The big sleep. p25 5 Jan 1990. Billions needed for child care. p1415 23 Mar 1990. Biotech protection. p811 16 Feb 1990. Biotechnology: manpower-starved? p1182 9 Mar 1990. Brain decade. p157 12 Jan 1990. Bridging the student-work gap. p157 12 Jan 1990. British brain drain. p811 16 Feb 1990. Brits cool to physics ad blitz. p1414 23 Mar 1990. CDC head named. p156 12 Jan 1990. China curbs outflow of students. p810 16 Feb 1990. China scholar drops Stanford suit. p1414 23 Mar 1990. Clearing brush in academe's groves. p406 26 Jan 1990. Congress and animal rights. p530 2 Feb 1990. Data too cheap to meter. p407 26 Jan 1990. Deforestation: Brazil's surprise role. p24 5 Jan 1990. Designing for aging. p1183 9 Mar 1990. Deutch bows out. p530 2 Feb 1990. Ecologists honored. p1182 9 Mar 1990. England versus the world's worms. p1415 23 Mar 1990. Environmentalist shakeup at State. p407 26 Jan 1990. European weather forecasters get one right. p633 9 Feb 1990. Ex-refusnik dies. p1183 9 Mar 1990. False alarm from vet

slaying? p1183 9 Mar 1990. Fleas turn a deaf ear. p156 12 Jan 1990. Funds flow to HUGO. p1036 2 Mar 1990. Global warming petition. p919 23 Feb 1990. Going where nukies fear to tread. p632 9 Feb 1990. GYRO experiment findings nixed. p1036 2 Mar 1990. Incredible lightness of gyroscopes. p156 12 Jan 1990. Inspector general cracks down at NSF. p284 19 Jan 1990. Japan reaches for the moon. p530 2 Feb 1990. Johns Hopkins talks with MIT's Deutch. p285 19 Jan 1990. Laser record set. p1182 9 Mar 1990. Layoffs hit Draper laboratory. p632 9 Feb 1990. Legal drugs: a view from neuroscience. p919 23 Feb 1990. Lobbying for an environmental NIH. p24 5 Jan 1990. Lords approve embryo research. p918 23 Feb 1990. Melting the Cold War. p285 19 Jan 1990. MIT pushes minority education. p407 26 Jan 1990. Monkey saga continues. p406 26 Jan 1990. Moss Landing labs destroyed by quake. p156 12 Jan 1990. New grants from Rockefeller. p1415 23 Mar 1990. New lease on life for Dahlem meetings. p632 9 Feb 1990. New science-minded leadership in Romania. p24 5 Jan 1990. The next "Nobel"? p918 23 Feb 1990. NIH left peerless for genome centers. p1182 9 Mar 1990. No more "babies as usual" p1183 9 Mar 1990. Noli me tangere. p1036 2 Mar 1990. NRC weighs in on precollege math. p918 23 Feb 1990. The NSF and biodiversity. p810 16 Feb 1990. NSF grant sizes trimmed for 1990. p284 19 Jan 1990. NSF supports the earth. p406 26 Jan 1990. NSF to spell out priorties. p24 5 Jan 1990. Oak Ridge seeks fusion reactor. p285 19 Jan 1990. Oat bran competitor. p285 19 Jan 1990. OTA speaks out on communications. p811 16 Feb 1990. Outside SSC funding is limited. p1414 23 Mar 1990. Patent court gets first scientist. p633 9 Feb 1990. Perils of moderation. p810 16 Feb 1990. Ph.D. squeeze. p406 26 Jan 1990. Planetary portrait gallery. p919 23 Feb 1990. Poles plug in. p811 16 Feb 1990. Primate use down. p811 16 Feb 1990. The prince and the forests. p918 23 Feb 1990. Prospectors cash in on geologist's find. p1298 16 Mar 1990. Protecting progress. p632 9 Feb 1990. Protecting software. p1415 23 Mar 1990. Rogue AIDS disk alarms researchers. p24 5 Jan 1990. Room at the top. p633 9 Feb 1990. Russian moon non-landing. p157 12 Jan 1990. Say what? p1414 23 Mar 1990. Schizophrenic brains. p1539 30 Mar 1990. *Scientific American* discovers TV. p1182 9 Mar 1990. Shockley shocker. p25 5 Jan 1990. Slick Soviet ads. p1414 23 Mar 1990. Stanford news director resigns. p156 12 Jan 1990. Stanford patents pay. p1298 16 Mar 1990. Students: Watson gets mixed grades. p284 19 Jan 1990. Superconductor partners. p1182 9 Mar 1990. Technology unlocks "lost" writings. p1298 16 Mar 1990. Testing relativity. p810 16 Feb 1990. Transgenic carp: pond-ready? p1298 16 Mar 1990. Treatment lacking for pregnant addicts. p285 19 Jan 1990. Tritium production. p919 23 Feb 1990. Tyler prize goes to Cornell scientists. p1539 30 Mar 1990. Uptown goes down. p530 2 Feb 1990. U.S.–Soviet diabetes project. p633 9 Feb 1990. What's in the bowl? p632 9 Feb 1990. Who gets a new liver? p919 23 Feb 1990. Who leads the (Ivy) league in "citation impact"? p1183 9 Mar 1990. Will John Deutch or Dr. X lead MIT? p25 5 Jan 1990. Wyngaarden to NAS. p1036 2 Mar 1990. Yeast lib. p918 23 Feb 1990.

Brinkman, W. F.: A National Engineering and Technology Agency (editorial). p901 23 Feb 1990.

Brinster, Ralph L. *See* Ryan, Thomas M.

Broccoli, A. J. *See* Manabe, S.

Brocklehurst, Cathy. *See* Redondo, Juan Miguel.

Brooks, J. M. *See* Fisher, C. R.

Brown, Arnold: Punitive damages and innovation (letter). p1281 16 Mar 1990.

Brown, George B.: DNA fingerprinting (letter). p1018 2 Mar 1990.

Brown, Truman R. *See* Szwergold, Benjamin S.

Brundin, Patrik. *See* Lindvall, Olle.

Brünger, Axel. *See* Milburn, Michael V.

Brush, Stephen B.: review of *Economic Anthropology*, by Stuart Plattner. p1349 16 Mar 1990.

Buck, David W. *See* Allan, Jonathan S.

Burch, Anita M.; Rigby, Stephen E. J.; Funk, Walter D.; MacGillivray, Ross T. A.; Mauk, Marcia R.; Mauk, A. Grant; Moore, Geoffrey R.: NMR characterization of surface interactions in the cytochrome b_5–cytochrome c complex. p831 16 Feb 1990.

Bursztajn, Sherry. *See* Berman, Stephen A.

C–D

Call, Katherine. *See* Lichter, Peter.

Calman, Françoise. *See* Salaün, Josselyne.

Campisi, Judith. *See* Seshadri, Tara.

Canright, G. S. and Girvin, S. M.: Fractional statistics: quantum possibilities in two dimensions. p1197 9 Mar 1990.

Cantin, Edouard M. *See* Sarver, Nava.

Carey, Michael; Leatherwood, Janet; Ptashne, Mark: A potent GAL4 derivative activates transcription at a distance in vitro. p710 9 Feb 1990.

Carson, Helen F. *See* Maione, Theodore E.

Carter, Ruth. *See* Holthuis, Joost.

Casey, Graham. *See* Trent, Jeffrey M.

Catterall, William A. *See* Scheuer, Todd.

Cava, R. J.: Structural chemistry and the local charge picture of copper oxide superconductors. p656 9 Feb 1990.

Cavadore, Jean-Claude. *See* Picard, André.

Chada, Kiran. *See* Xiang, Xin.

Chance, Kelly V. *See* Traub, Wesley A.

Chandy, K. George; Williams, Calvin B.; Spencer, Robert H.; Aguilar, Barbara A.; Ghanshani, Sanjiv; Tempel, Bruce L.; Gutman, George A.: A family of three mouse potassium channel genes with intronless coding regions. p973 23 Feb 1990.

Chang, Pairoj S. *See* Sarver, Nava.

Charles, Daniel (news): East German environment comes into the light. p274 19 Jan 1990.

Charles, E. R. *See* Logothetis, N. K.

Chen, Phang-Lang. *See* Bookstein, Robert.

Cheng, J. P. *See* Arnett, Edward M.

Cherfas, Jeremy (news): Feathers fly in grouse population dispute. p32 5 Jan 1990. Fossils and British pride. p160 12 Jan 1990. Greenpeace and science: oil and water? p1288 16 Mar 1990. High-tech and low-tech: control strategies today. p400 26 Jan 1990. Malaria vaccines: the failed promise. p402 26 Jan 1990. Stretching the point. p630 9 Feb 1990. University restructuring based on false premise? p278 19 Jan 1990. Virus-like agent blamed for mad cow disease. p523 2 Feb 1990.

Cho, Kathleen R. *See* Fearon, Eric R.

Choi, D. W. *See* Weiss, J. H.

Chong, Wang. *See* Wolff, Jon A.

Christy, John R. *See* Spencer, Roy W.

Churchill, Frederick B.: review of *The Mendelian Revolution*, by Peter J. Bowler. p348 19 Jan 1990.

Cipra, Barry (news): All wound up in DNA. p914 23 Feb 1990. Mathematics untwists the double helix. p913 23 Feb 1990. Packing your *n*-dimensional marbles. p1035 2 Mar 1990.

Clancy, John P. *See* Welsh, Michael J.

Clay, Don R.: Hazardous waste sites (letter). p1166 9 Mar 1990.

Cochrane, Alan W. *See* Olsen, Henrik S.

Coffey, Shannon; Deprit, André; Deprit, Etienne; Healy, Liam: Painting the phase space portrait of an integrable dynamical system. p833 16 Feb 1990.

Coggeshall, K. M. *See* Mustelin, T.

Colicelli, John. *See* Field, Jeffrey.

Collin, Carlos. *See* Nelson, Thomas J.

Colombini, Marco. *See* Blachly-Dyson, Elizabeth.

Colombo, Michael; D'Amato, Michael R.; Rodman, Hillary R.; Gross, Charles G.: Auditory association cortex lesions impair auditory short-term memory in monkeys. p336 19 Jan 1990.

Coltey, Monique. *See* Salaün, Josselyne.

Conroy, Glenn C.; Vannier, Michael W.; Tobias, Phillip V.: Endocranial features of *Australopithecus africanus* revealed by 2- and 3-D computed tomography. p838 16 Feb 1990.

Cooper, Jonathan A. *See* Kazlauskas, Andrius.

Cooper, Mark S. *See* Cornell-Bell, Ann H.

Corn, M. *See* Mossman, B. T.

Cornell-Bell, Ann H.; Finkbeiner, Steven M.; Cooper, Mark S.; Smith, Stephen J.: Glutamate induces calcium waves in cultured astrocytes: long-range glial signaling. p470 26 Jan 1990.

Cosenza, Stephen C. *See* Holthuis, Joost.

Counillon, L. *See* Sardet, C.

Coutinho, Antonio. *See* Salaün, Josselyne.

Covey, Curt: Molecule of the Year (letter). p904 23 Feb 1990.

Covich, Alan P. *See* Crowl, Todd A.

Cox, Josephine H.; Yewdell, Jonathan W.; Eisenlohr, Laurence C.; Johnson, Philip R.; Bennink, Jack R.: Antigen presentation requires transport of MHC class I molecules from the endoplasmic reticulum. p715 9 Feb 1990.

Cox, S. D. *See* Weisenhorn, A. L.

Crain, P. F. *See* Rilling, H. C.

Crane, Alan T. *See* Fulkerson, William.

Crawford, James W. *See* Teicher, Beverly A.

Crawford, Mark (news): Bacteria effective in Alaska cleanup. p1537 30 Mar 1990. DOE's born-again solar energy plan. p1403 23 Mar 1990. Gramm-Rudman $64 billion question mark. p404 26 Jan 1990. Hot fusion: a meltdown in political support. p1534 30 Mar 1990. MIT picks biologist as president. p912 23 Feb 1990. More misconduct hearings. p404 26 Jan 1990. Science committees: change at the top. p405 26 Jan 1990. Scientists battle over Grand Canyon pollution. p911 23 Feb 1990. Sharp's reversal shocks MIT campus. p1026 2 Mar 1990. Spotlight on education. p405 26 Jan 1990. Super Collider advocates tangle with cost cutters. p152 12 Jan 1990. Trouble ahead for the SSC. p1538 30 Mar 1990.

Creighton, Thomas E.: review of *Prediction of Protein Structure and the Principles of Protein Conformation*, edited by Gerald D. Fasman. p1351 16 Mar 1990.

Crowl, Todd A. and Covich, Alan P.: Predator-induced life-history shifts in a freshwater snail. p949 23 Feb 1990.

Cruickshank, Alexander M.: Gordon Research Conferences. p1100 2 Mar 1990.

Culliton, Barbara J. (news): Déjà vu in AIDS priority fight. p1532 30 Mar 1990. Emerging viruses, emerging threat. p279 19 Jan 1990. Gallo's potential jurors. p1533 30 Mar 1990. Gene therapy clears first hurdle. p1287 16 Mar 1990. Gene therapy proposed. p1181 9 Mar 1990. Influenza mutants deadly. p280 19 Jan 1990. Lasker Foundation suspends 1990

awards. p1026 2 Mar 1990. Monsanto renews ties to Washington University. p1027 2 Mar 1990. NIH director: the search goes on . . . and on. p628 9 Feb 1990. NIH goes "extra mile" on Gallo. p908 23 Feb 1990. NIH seeks a chief, desperately. p1176 9 Mar 1990. Problem foreshadowed at Harvard. p1405 23 Mar 1990. Rockefeller braces for Baltimore. p148 12 Jan 1990. Stanford psychiatry deal falls through. p1405 23 Mar 1990. Yeast researcher rises to top at Whitehead. p1026 2 Mar 1990.

Cunningham, Brian C.; Henner, Dennis J.; Wells, James A.: Engineering human prolactin to bind to the human growth hormone receptor. p1461 23 Mar 1990.

Cunningham, Gary L. *See* Schlesinger, William H.

D'Amato, Michael R. *See* Colombo, Michael.

Daley, George Q.; Van Etten, Richard A.; Baltimore, David: Induction of chronic myelogenous leukemia in mice by the P210$^{bcr/abl}$ gene of the Philadelphia chromosome. p824 16 Feb 1990.

Daniels-McQueen, Susan. *See* Lin, Jih-Jing.

Daut, Jürgen; Maier-Rudolph, Willibald; von Beckerath, Nikolas; Mehrke, Gerhard; Günther, Kerstin; Goedel-Meinen, Liselotte: Hypoxic dilation of coronary arteries is mediated by ATP-sensitive potassium channels. p1341 16 Mar 1990.

Davidon, Ruth. *See* Liou, Hsiou-Chi.

Davis, Bernard D.: Scientific integrity (letter). p145 12 Jan 1990.

Davis, Fred C. *See* Ralph, Martin R.

Davis, R. W. *See* Sachs, A. B.

Dawes, Robyn M. *See* Faust, David.

Dehmelt, Hans: Experiments on the structure of an individual elementary particle. p539 2 Feb 1990.

Delaney, Paul T.; Fiske, Richard S.; Miklius, Asta; Okamura, Arnold T.; Sako, Maurice K.: Deep magma body beneath the summit and rift zones of Kilauea Volcano, Hawaii. p1311 16 Mar 1990.

Delwiche, C. C.: review of *The Environmental Record in GLaciers and Ice Sheets*, edited by H. Oeschger and C. C. Langway. p1486 23 Mar 1990.

Denoulet, Philippe. *See* Eddé, Bernard.

Deprit, André. *See* Coffey, Shannon.

Deprit, Etienne. *See* Coffey, Shannon.

DeRocco, Susan E. *See* Lusso, Paolo.

Desbruyères, Elizabeth. *See* Eddé, Bernard.

Desiderio, Stephen V. *See* Dymecki, Susan M.

deVos, Abraham M. *See* Milburn, Michael V.

Dewhurst, Stephen: Poverty among U.S. children (letter). p905 23 Feb 1990.

DiSalvo, Francis J.: Solid-state chemistry: a rediscovered chemical frontier. p649 9 Feb 1990.

Doktycz, Stephen J. and Suslick, Kenneth S.: Interparticle collisions driven by ultrasound. p1067 2 Mar 1990.

Donner, Amy L. *See* Maione, Theodore E.

Dorée, Marcel. *See* Picard, André.

Dove, William F. *See* Moser, Amy Rapaich.

Dugas, D. P. *See* Retallack, Gregory J.

Dunn, Ethel P.: Soviet alcoholism (letter). p515 2 Feb 1990.

Dunn, Robert. *See* Scheuer, Todd.

Dunn, Stephen P.: Soviet sociology (letter). p515 2 Feb 1990.

Dutta, B. *See* Ramesh, R.

Dye, James L.: Electrides: ionic salts with electrons as the anions. p663 9 Feb 1990.

Dymecki, Susan M.; Niederhuber, John E.; Desiderio, Stephen V.: Specific expression of a tyrosine kinase gene, *blk*, in B lymphoid cells. p332 19 Jan 1990.

E–F

Ebert, Lawrence B.: Is soot composed predominantly of carbon clusters? p1468 23 Mar 1990.

Eddé, Bernard; Rossier, Jean; Le Caer, Jean-Pierre; Desbruyères, Elizabeth; Gros, François; Denoulet, Philippe: Posttranslational glutamylation of α-tubulin. p83 5 Jan 1990.

Edery, Isaac. *See* Roy, Sophie.

Eisenlohr, Laurence C. *See* Cox, Josephine H.

Elings, V. B. *See* Weisenhorn, A. L.

Ellickson, Phyllis L. and Bell, Robert M.: Drug prevention in junior high: a multi-site longitudinal test. p1299 16 Mar 1990.

Ellis, Christine. *See* Kazlauskas, Andrius.

English, A. D. *See* Wendoloski, J. J.

Enns, James T. and Rensink, Ronald A.: Influence of scene-based properties on visual search. p721 9 Feb 1990.

Ensoli, Barbara. *See* Lusso, Paolo.

Eom, C. B. *See* Sun, J. Z.

Epple, Dennis. *See* Argote, Linda.

Epstein, W. W. *See* Rilling, H. C.

Erickson, John. *See* Matayoshi, Edmund D.

Estess, Roy: Space shuttle advanced solid rocket motor testing (letter). p904 23 Feb 1990.

Eto, Yuzuru. *See* Nakamura, Takanori.

Evans, Glen A. *See* Lichter, Peter.

Fago, Frederick J. *See* Moldowan, J. Michael.

Farley, Francis W. and McClelland, Gary M.: Orientational dielectric relaxation of collisionless molecules. p1572 30 Mar 1990.

Farnsworth, Christopher C.; Gelb, Michael H.; Glomset, John A.: Identification of geranylgeranyl-modified proteins in HeLa cells. p320 19 Jan 1990.

Farrand, William R.: review of *Quaternary Type Sections*, edited by Jim Rose and Christian Schlüchter. p867 16 Feb 1990.

Faust, David; Meehl, Paul E.; Dawes, Robyn M.: Clinical and actuarial judgment (letter). p146 12 Jan 1990.

Fearon, Eric R.; Cho, Kathleen R.; Nigro, Janice M.; Kern, Scott E.; Simons, Jonathan W.; Ruppert, J. Michael; Hamilton, Stanley R.; Preisinger, Antonette C.; Thomas, Giles; Kinzler, Kenneth W.; Vogelstein, Bert: Identification of a chromosome 18q gene that is altered in colorectal cancers. p49 5 Jan 1990.

Felgner, Philip L. *See* Wolff, Jon A.

Ferrell, William K. *See* Harmon, Mark E.

Field, Jeffrey; Xu, Hao-Peng; Michaeli, Tamar; Ballester, Roymarie; Sass, Philip; Wigler, Michael; Colicelli, John: Mutations of the adenylyl cyclase gene that block RAS function in *Saccharomyces cerevisiae*. p464 26 Jan 1990.

Fink, G. *See* Mobbs, C. V.

Finkbeiner, Steven M. *See* Cornell-Bell, Ann H.

Finn, Patricia W. *See* Liou, Hsiou-Chi.

Fiorillo, Anthony R.: review of *Dinosaur Tracks and Traces*, edited by David D. Gillette and Martin G. Lockley. p732 9 Feb 1990.

Fisher, C. R.; Kennicutt, M. C., II; Brooks, J. M.: Stable carbon isotopic evidence for carbon limitation in hydrothermal vent vestimentiferans. p1094 2 Mar 1990.

Fiske, Richard S. *See* Delaney, Paul T.

Foner, Nancy: review of *The Informal Economy*, edited by Alejandro Portes, Manuel Castells, and Lauren A. Benton. p727 9 Feb 1990.

Foote, Christopher S.: A broken system? (letter). p1388 23 Mar 1990.

Forte, Michael. *See* Blachly-Dyson, Elizabeth.

Fosset, Michel. *See* Amoroso, Salvatore.

Foster, Russell G. *See* Ralph, Martin R.

Foukal, P. and Lean, J.: An empirical model of total solar irradiance variation between 1874 and 1988. p556 2 Feb 1990.

Fox, Lucius S.; Kozik, Mariusz; Winkler, Jay R.; Gray, Harry B.: Gaussian free-energy dependence of electron-transfer rates in iridium complexes. p1069 2 Mar 1990.

Fox, Maurice S.; Magasanik, Boris; Signer, Ethan R.; Solomon, Frank; Gellert, Martin F.; Haber, James E.: The genome project: pro and con (letter). p270 19 Jan 1990.

Frackowiak, Richard. *See* Lindvall, Olle.

Franchi, A. *See* Sardet, C.

Franchini, Genoveffa. *See* Lusso, Paolo.

Frank, Douglas G.; Batina, Nikola; Golden, Teresa; Lu, Frank; Hubbard, Arthur T.: Imaging surface atomic structure by means of Auger electrons. p182 12 Jan 1990.

Frank, Martin: NIH budget crisis (letter). p393 26 Jan 1990.

Franklin, Jerry F. *See* Harmon, Mark E.

Frei, Emil, III. *See* Teicher, Beverly A.

Friedman, William E.: Double fertilization in *Ephedra*, a nonflowering seed plant: its bearing on the origin of angiosperms. p951 23 Feb 1990.

Fry, Kirk E. *See* Reyes, Gregory R.

Fuchs, Victor R.: The health sector's share of the gross national product. p534 2 Feb 1990.

Fulkerson, William; Reister, David B.; Auerbach, Stanley I.; Perry, Alfred M.; Crane, Alan T.; Kash, Don E.: Global warming (letter). p620 9 Feb 1990.

Fung, Inez Y. *See* Tans, Pieter P.

Funk, Walter D. *See* Burch, Anita M.

Furth, Mark E. *See* Maisonpierre, Peter C.

G–H

Gaffield, Livia. *See* Lin, Jih-Jing.

Gai, Pratibha L. and McCarron, Eugene M., III: Direct observation and analysis of CuO_2 shear defects in $La_{2-x}Sr_xCuO_4$. p553 2 Feb 1990.

Gaisser, Thomas K.: Gamma rays and neutrinos as clues to the origin of high energy cosmic rays. p1049 2 Mar 1990.

Galaburda, Albert M.: Molecule of the Year (letter). p904 23 Feb 1990.

Galambos, Louis: review of *Control Through Communication*, by JoAnne Yates. p474 26 Jan 1990.

Galletly, Neil P. *See* Sofroniew, Michael V.

Gallant, Jonathan A. and Prothero, John W.: Department size and quality (letter). p1530 30 Mar 1990.

Gallo, Robert C. *See* Lusso, Paolo.

Gardner, K. H. *See* Wendoloski, J. J.

Gardner, Martin: *Discover*'s advertisements (letter). p515 2 Feb 1990.

Gauthier, Jacques A. *See* Houck, Marilyn A.

Geballe, T. H. *See* Ramesh, R. *See also* Sun, J. Z.

Gee, J. B. L. *See* Mossman, B. T.

Gelb, Michael H. *See* Farnsworth, Christopher C.

Gellert, Martin F. *See* Fox, Maurice S.

Gerhardt, Martin; Schuster, Heike; Tyson, John J.: A cellular automaton model of excitable media including curvature and dispersion. p1563 30 Mar 1990.

Ghanshani, Sanjiv. *See* Chandy, K. George.

Giaid, Adel. *See* Yoshizawa, Toshihiro.

Gibbons, Ann (news): Paleontology by bulldozer. p1407 23 Mar 1990.

Gibbs, James. *See* Weller, Aron.

Gibson, Sally J. *See* Yoshizawa, Toshihiro.

Gilbert, Walter. *See* Berman, Stephen A.

Gill, Gordon N. *See* Wells, Alan.

Gill, Stanley J. *See* Murphy, Kenneth P.

Gingras, Yves: review of *The Uses of Experiment*, edited by David Gooding, Trevor Pinch, and Simon Schaffer. p1592 30 Mar 1990.

Girosi, F. *See* Poggio, T.

Girvin, S. M. *See* Canright, G. S.
Gleason, Jean Berko: review of *The Sociolinguistics of the Deaf Community*, edited by Ceil Lucas. p1127 2 Mar 1990.
Glimcher, Laurie H. *See* Liou, Hsiou-Chi.
Glomset, John A. *See* Farnsworth, Christopher C.
Godfrey, D. A.: The rotation period of Saturn's polar hexagon. p1206 9 Mar 1990. *See also* Allison, M.
Goedel-Meinen, Liselotte. *See* Daut, Jürgen.
Golden, Teresa. *See* Frank, Douglas G.
Goldschmidt-Clermont, Pascal J.; Machesky, Laura M.; Baldassare, Joseph J.; Pollard, Thomas D.: The actin-binding protein profilin binds to PIP_2 and inhibits its hydrolysis by phospholipase C. p1575 30 Mar 1990.
Golub, Edward S.: review of *A History of Immunology*, by Arthur M. Silverstein and *Immunology, 1930–1980*, edited by Pauline M. H. Mazumdar. p347 19 Jan 1990.
Gong, Bang-Jian. *See* Tao, Terence.
Gorman, Daniel M. *See* Itoh, Naoto.
Gorski, Jack. *See* Newman, Peter J.
Gould, S. A. C. *See* Weisenhorn, A. L.
Granger, Richard. *See* Ambros-Ingerson, José.
Gray, Alane M. and Mason, Anthony J.: Requirement for activin A and transforming growth factor–β1 pro-regions in homodimer assembly. p1328 16 Mar 1990.
Gray, Gary S. *See* Maione, Theodore E.
Gray, Harry B. *See* Fox, Lucius S.
Green, Daniel W. E.; Rickman, Hans; Porter, Alain C.; Meech, Karen J.: The strange periodic comet Machholz. p1063 2 Mar 1990.
Greene, B. I.; Orenstein, J.; Schmitt-Rink, S.: All-optical nonlinearities in organics. p679 9 Feb 1990.
Greer, Peter R.: Boston University/Chelsea project (letter). p1167 9 Mar 1990.
Grehan, J. R.: The decline of systematics (letter). p270 19 Jan 1990.
Grogan, William R.: Engineering's silent crisis (editorial). p381 26 Jan 1990.
Gros, François. *See* Eddé, Bernard.
Gross, Charles G. *See* Colombo, Michael.
Guggino, William B.: Chloride channels in cystic fibrosis patients (technical comment). p222 12 Jan 1990.
Gundel, Robert H. *See* Wegner, Craig D.
Günther, Kerstin. *See* Daut, Jürgen.
Gustafsson, Mikael. *See* Lee, Juliet.
Gustavii, Björn. *See* Lindvall, Olle.
Gutman, George A. *See* Chandy, K. George.
Haber, James E. *See* Fox, Maurice S.
Hamilton, Stanley R. *See* Fearon, Eric R.
Hansen, Anker J. *See* Sheardown, Malcolm J.
Hansma, P. K. *See* Weisenhorn, A. L.
Happ, Mary Pat. *See* Woodland, David.
Harmon, Mark E.; Ferrell, William K.; Franklin, Jerry F.: Effects on carbon storage of conversion of old-growth forests to young forests. p699 9 Feb 1990.
Harrison, Stephen C. *See* Pabo, Carl O.
Hartl, Franz-Ulrich and Neupert, Walter: Protein sorting to mitochondria: evolutionary conservations of folding and assembly. p930 23 Feb 1990.
Hartley, D. M. *See* Weiss, J. H.
Harush, S. *See* Lieberman, K.
Harvey, Noel G. *See* Arnett, Edward M.
Hata, Shingo. *See* Redondo, Juan Miguel.
Hawkins, Daniel B.: U.S. oil and gas consumption: is another crisis ahead? (letter). p1280 16 Mar 1990.
Haynes, Nancy. *See* Wegner, Craig D.
Healy, Liam. *See* Coffey, Shannon.
Hearn, Paul P., Jr. *See* Wood, Warren W.
Heffner, Christopher D.; Lumsden, Andrew G. S.; O'Leary, Dennis D. M.: Target control of collateral extension and directional axon growth in the mammalian brain. p217 12 Jan 1990.
Hegerfeldt, Gerhard C.: review of *Photons and Atoms*, by Claude Cohen-Tannoudji, Jacques Dupont-Roc, and Gilbert Grynberg. p732 9 Feb 1990.
Heinrichs, Volker; Bach, Montserrat; Winkelmann, Gerd; Lührmann, Reinhard: U1-specific protein C needed for efficient complex formation of U1 snRNP with a 5′ splice site. p69 5 Jan 1990.
Heinrikson, R. L. *See* McQuade, T. J.
Helmann, John D.; Ballard, Barry T.; Walsh, Christopher T.: The MerR metalloregulatory protein binds mercuric ion as a tricoordinate metal-bridged dimer. p946 23 Feb 1990.
Hemley, R. J. *See* Mao, H. K.
Henner, Dennis J. *See* Cunningham, Brian C.
Henthorn, Paula; Kiledjian, Megerditch; Kadesch, Tom: Two distinct transcription factors that bind the immunoglobulin enhancer μE5/κE2 motif. p467 26 Jan 1990.
Herman, Terence S. *See* Teicher, Beverly A.
Hermanson, Gary. *See* Lichter, Peter.
Hernández-Cruz, Arturo; Sala, Francisco; Adams, Paul R.: Subcellular calcium transients visualized by confocal microscopy in a voltage-clamped vertebrate neuron. p858 16 Feb 1990.
Hershey, Andrew D. and Krause, James E.: Molecular characterization of a functional cDNA encoding the rat substance P receptor. p958 23 Feb 1990.
Hickey, Leo J. *See* Taylor, David Winship.
Hilton, Thomas L.: review of *Blacks, Science, and American Education*, edited by Willie Pearson, Jr. and H. Kenneth Bechtel. p349 19 Jan 1990.
Himmelman, John H. *See* Starr, Michel.
Hirsch, Robert L.: U.S. oil and gas consumption: is another crisis ahead? (letter). p1280 16 Mar 1990.
Hirschinger, J. *See* Wendoloski, J. J.
Hockfield, Susan: review of *Neurobiology of Glycoconjugates*, edited by Richard U. Margolis and Renée K. Margolis. p733 9 Feb 1990.
Hoffman, Paul: *Discover*'s advertisements. p515 2 Feb 1990.
Hökfelt, Tomas. *See* Persson, Håkan.
Holden, Constance (news): Call for environmental institutes. p1536 30 Mar 1990. Can there be "Success for All"? p1401 23 Mar 1990. Head Start at 25: false start, sure future. p1400 23 Mar 1990. (letter): Shockley: a scholar. p905 23 Feb 1990.
Holden, Sylvia A. *See* Teicher, Beverly A.
Holthuis, Joost; Owen, Thomas A.; van Wijnen, André J.; Wright, Kenneth L.; Ramsey-Ewing, Anna; Kennedy, Mary Beth; Carter, Ruth; Cosenza, Stephen C.; Soprano, Kenneth J.; Lian, Jane B.; Stein, Janet L.; Stein, Gary S.: Tumor cells exhibit deregulation of the cell cycle histone gene promoter factor HiNF-D. p1454 23 Mar 1990.
Honoré, Tage. *See* Sheardown, Malcolm J.
Horgan, John (news): Quasicrystals: rules of the game. p1020 2 Mar 1990.
Houck, Marilyn A.; Gauthier, Jacques A.; Strauss, Richard E.: Allometric scaling in the earliest fossil bird, *Archaeopteryx lithographica*. p195 12 Jan 1990.
Housman, David. *See* Lichter, Peter.
Hovanessian, Ara G. *See* Roy, Sophie.
Hubbard, Arthur T. *See* Frank, Douglas G.
Huenneke, Laura F. *See* Schlesinger, William H.
Hunt, Anthony J. *See* Maione, Theodore E.
Hurlbert, A. C. *See* Logothetis, N. K.
Hwang, D. M. *See* Ramesh, R.

I–K

Inam, A. *See* Ramesh, R.
Ip, Nancy Y. *See* Maisonpierre, Peter C.
Isacson, Ole. *See* Sofroniew, Michael V.
Isakov, N. *See* Mustelin, T.
Ishii, Ai. *See* Itoh, Naoto.
Ishizaki, Hironori. *See* Kawakami, Atsushi.
Itoh, Naoto; Yonehara, Shin; Schreurs, Jolanda; Gorman, Daniel M.; Maruyama, Kazuo; Ishii, Ai; Yahara, Ichiro; Arai, Ken-ichi; Miyajima, Atsushi: Cloning of an interleukin-3 receptor gene: a member of a distinct receptor gene family. p324 19 Jan 1990.
Iversen, L. L. *See* Allen, H. L.
Iwami, Masafumi. *See* Kawakami, Atsushi.
Jacobsen, Poul. *See* Sheardown, Malcolm J.
Jacobson, Ken. *See* Lee, Juliet.
Jacobson, Stephen R. *See* Moldowan, J. Michael.
Jani, Agnes. *See* Wolff, Jon A.
Jarrell, Wesley M. *See* Schlesinger, William H.
Jastrow, Robert: Global warming report (letter). p14 5 Jan 1990.
Jeang, Kuan-Teh; Widen, Steven G.; Semmes, Oliver J., IV; Wilson, Samuel H.: HTLV-I trans-activator protein, Tax, is a trans-repressor of the human β-polymerase gene. p1082 2 Mar 1990.
Jeganathan, Alwarsamy. *See* Moldowan, J. Michael.
Jemma, Cristina. *See* Lusso, Paolo.
Johnson, D. E. *See* Van Rie, J.
Johnson, David G. *See* Traub, Wesley A.
Johnson, Philip R. *See* Cox, Josephine H.
Jones, Lucile M. *See* Reasenberg, Paul A.
Jordan, Steven R. *See* Pabo, Carl O.
Kadesch, Tom. *See* Henthorn, Paula.
Kalbacher, Hubert. *See* Schild, Hansjörg.
Kalyanaraman, V. S. *See* Lusso, Paolo.
Kanazawa, Ichiro. *See* Yoshizawa, Toshihiro.
Kaneshima, Hideto. *See* McCune, Joseph M.
Kappler, Francis. *See* Szwergold, Benjamin S.
Karacostas, V. *See* McQuade, T. J.
Kash, Don E. *See* Fulkerson, William.
Kashket, Eva R.: review of *Clostridia*, edited by Nigel P. Minton and David J. Clarke. p865 16 Feb 1990.
Kassen, Melinda. *See* Luecke, Daniel F.
Kasten, Robert W., Jr.: Conservation of rare plants (letter). p1388 23 Mar 1990.
Kataoka, Hiroshi. *See* Kawakami, Atsushi.
Katze, Michael G. *See* Roy, Sophie.
Kaula, William M.: Venus: a contrast in evolution to Earth. p1191 9 Mar 1990.
Kawakami, Atsushi; Kataoka, Hiroshi; Oka, Tadanori; Mizoguchi, Akira; Kimura-Kawakami, Mina; Adachi, Takashi; Iwami, Masafumi; Nagasawa, Hiromichi; Suzuki, Akinori; Ishizaki, Hironori: Molecular cloning of the *Bombyx mori* prothoracicotropic hormone. p1333 16 Mar 1990.
Kaye, D. H.: Punitive damages and innovation (letter). p1280 16 Mar 1990.
Kazlauskas, Andrius; Ellis, Christine; Pawson, Tony; Cooper, Jonathan A.: Binding of GAP to activated PDGF receptors. p1578 30 Mar 1990.
Kennedy, Mary Beth. *See* Holthuis, Joost.
Kennicutt, M. C., II. *See* Fisher, C. R.
Kern, Scott E. *See* Fearon, Eric R.
Kerr, Richard A. (news): Global warming continues in 1989. p521 2 Feb 1990. The great asteroid roast: was it rare or well-done? p527 2 Feb 1990. Hurricane-drought link bodes ill for U.S. coast. p162 12 Jan 1990. Hurricane forecasting shows promise. p917 23 Feb 1990. Impact–geomagnetic reversal link rejected. p916 23 Feb 1990. Is the Siljan hole complete-

ly dry? p1178 9 Mar 1990. Making deep earthquakes in the laboratory? p30 5 Jan 1990. Ozone destruction closer to home. p1297 16 Mar 1990. Planetary science funds cut. p282 19 Jan 1990. Puzzling out the tectonic plates. p808 16 Feb 1990. S asteroids at controversy's core. p528 2 Feb 1990. When a radical experiment goes bust. p1177 9 Mar 1990.
Khazaal, Ibrahim. *See* Salaün, Josselyne.
Kiledjian, Megerditch. *See* Henthorn, Paula.
Kilmister, C. W.: review of *Schrödinger*, by Walter Moore. p985 23 Feb 1990.
Kim, Hyun. *See* Smith, Mark R.
Kim, Jungsuh P. *See* Reyes, Gregory R.
Kim, Sung-Hou. *See* Milburn, Michael V.
Kimura, Sadao. *See* Yoshizawa, Toshihiro.
Kimura-Kawakami, Mina. *See* Kawakami, Atsushi.
Kingkade, W. Ward. *See* Torrey, Barbara Boyle.
Kinzler, Kenneth W. *See* Fearon, Eric R.
Klausner, Richard D. *See* Bonifacino, Juan S.
Klein, Stephen; Petersilia, Joan; Turner, Susan: Race and imprisonment decisions in California. p812 16 Feb 1990.
Kleinmuntz, Benjamin: Clinical and actuarial judgment (letter). p146 12 Jan 1990.
Koch, H. William: review of *Renewing a Scientific Society*, by Dael Wolfle. p581 2 Feb 1990.
Koh, J. *See* Weiss, J. H.
Kohn, Alan J.: review by *Shore Ecology of the Gulf of Mexico*, by Joseph C. Britton and Brian Morton. p986 23 Feb 1990.
Koi, Minoru. *See* Sugawara, Osamu.
Kopelman, R. *See* Lieberman, K.
Koshland, Daniel E., Jr. (editorials): Andrei Sakharov, 1921–1989. p265 19 Jan 1990. Priority one: rescue the environment. p777 16 Feb 1990. Research policy and the peace dividend. p1165 9 Mar 1990. To see ourselves as others see us. p9 5 Jan 1990. Two plus two equals five. p1381 23 Mar 1990. (letter): The genome project: pro and con. p270 19 Jan 1990. Molecule of the Year. p904 23 Feb 1990.
Kozik, Mariusz. *See* Fox, Lucius S.
Kraemer, Thomas F. *See* Wood, Warren W.
Krafft, Grant A. *See* Matayoshi, Edmund D.
Krangel, Michael S. *See* Redondo, Juan Miguel.
Kraus, Nicholas C.: review of *Nearshore Sediment Transport*, edited by Richard J. Seymour. p987 23 Feb 1990.
Krause, James E. *See* Hershey, Andrew D.
Krauss, Lawrence M.: review of *Particle Physics and Cosmology*, by P. D. B. Collins, A. D. Martin, and E. J. Squires. p92 5 Jan 1990.
Kumar, Sanjay: DNA fingerprinting (letter). p1019 2 Mar 1990.
Kung, Hsiang-fu. *See* Smith, Mark R.
Kupfermann, Irving. *See* Teyke, Thomas.

L

Labruyere, J. *See* Olney, J. W.
Ladne, Paula A. *See* Sarver, Nava.
Lairson, B. *See* Sun, J. Z.
Lamberg-Karlovsky, C. C.: review of *Tracing Archaeology's Past*, edited by Andrew L. Christenson. p581 2 Feb 1990.
Lapp, Ralph E.: BEIR V: Implications for the nuclear workforce (letter). p620 9 Feb 1990.
Lawton, Stephen L. and Rohrbaugh, Wayne J.: The framework topology of ZSM-18, a novel zeolite containing rings of three (Si,Al)-O species. p1319 16 Mar 1990.
Lazar, Cheri S. *See* Wells, Alan.
Lazar, James G. and Ross, John: Changes in mean concentration, phase shifts, and dissipation in a forced oscillatory reaction. p189 12 Jan 1990.
Lazdunski, Michel. *See* Amoroso, Salvatore.
Leaird, D. E. *See* Weiner, A. M.
Leakey, R. E.: Elephant appropriation (letter). p271 19 Jan 1990.
Lean, D. R. S. *See* Mazumder, A.
Lean, J. *See* Foukal, P.
Leatherwood, Janet. *See* Carey, Michael.
Leavis, Paul C. *See* Tao, Terence.
Le Caer, Jean-Pierre. *See* Eddé, Bernard.
Le Douarin, Nicole M. *See* Salaün, Josselyne.
Lee, Cathy Y. *See* Moldowan, J. Michael.
Lee, Juliet; Gustafsson, Mikael; Magnusson, Karl-Eric; Jacobson, Ken: The direction of membrane lipid flow in locomoting polymorphonuclear leukocytes. p1229 9 Mar 1990.
Lee, Wen-Hwa. *See* Bookstein, Robert.
Leenders, Klaus L. *See* Lindvall, Olle.
Letts, L. Gordon. *See* Wegner, Craig D.
Lewis, A. *See* Lieberman, K.
Li, Ming. *See* Welsh, Michael J.
Lian, Jane B. *See* Holthuis, Joost.
Libet, Benjamin: "Subjective perception" p727 9 Feb 1990.
Lichter, Peter; Tang, Chieh-ju Chang; Call, Katherine; Hermanson, Gary; Evans, Glen A.; Housman, David; Ward, David C.: High-resolution mapping of human chromosome 11 by in situ hybridization with cosmid clones. p64 5 Jan 1990.
Lieberman, K.; Harush, S.; Lewis, A.; Kopelman, R.: A light source smaller than the optical wavelength. p59 5 Jan 1990.
Lim, Wendell A. *See* Bowie, James U.
Lin, Jih-Jing; Daniels-McQueen, Susan; Patino, Maria M.; Gaffield, Livia; Walden, William E.; Thach, Robert E.: Depression of ferritin messenger RNA translation by hemin in vitro. p74 5 Jan 1990.
Lindsay, Ronald M. *See* Maisonpierre, Peter C.
Lindvall, Olle; Brundin, Patrik; Widner, Håkan; Rehncrona, Stig; Gustavii, Björn; Frackowiak, Richard; Leenders, Klaus L.; Sawle, Guy; Rothwell, John C.; Marsden, C. David; Björklund, Anders: Grafts of fetal dopamine neurons survive and improve motor function in Parkinson's disease. p574 2 Feb 1990.
Lindzen, Richard S.: Global warming report (letter). p14 5 Jan 1990.
Liou, Hsiou-Chi; Boothby, Mark R.; Finn, Patricia W.; Davidon, Ruth; Nabavi, Nasrin; Zeleznik-Le, Nancy J.; Ting, Jenny P.-Y.; Glimcher, Laurie H.: A new member of the leucine zipper class of proteins that binds to the HLA DRα promoter. p1581 30 Mar 1990.
Litan, Robert E. and Suchman, Peter O.: U.S. trade policy at a crossroad. p33 5 Jan 1990.
Littlejohn, Stephen E. *See* Mahoney, Richard J.
Liu, L. *See* McQuade, T. J.
Liu, Ya-lun. *See* Smith, Mark R.
Livingston, Katherine: review of *Advances in Mutagenesis Research*, edited by G. Obe. p1594 30 Mar 1990. review of *Modulation of Defined Vertebrate Neural Circuits*, edited by Michael Davis, Barry L. Jacobs, and Ronald I. Schoenfeld. p1594 30 Mar 1990.
Lockwood, G. W. *See* Radick, Richard R.
Logothetis, Nikos K.: "Subjective perception" p727 9 Feb 1990.
——; Schiller, P. H.; Charles, E. R.; Hurlbert, A. C.: Perceptual deficits and the activity of the color-opponent and broad-band pathways at isoluminance. p214 12 Jan 1990.
Lory, Philippe. *See* Picard, André.
Lu, Frank. *See* Frank, Douglas G.
Lucchesi, John C.: NIH budget crisis (letter). p393 26 Jan 1990.
Ludwig, Steven R.; Bowen, Ben; Beach, Larry; Wessler, Susan R.: A regulatory gene as a novel visible marker for maize transformation. p449 26 Jan 1990.
Luecke, Daniel F. and Kassen, Melinda: Waste site cleanup (letter). p622 9 Feb 1990.
Lugo, Tracy G.; Pendergast, Ann-Marie; Muller, Alexander J.; Witte, Owen N.: Tyrosine kinase activity and transformation potency of *bcr-abl* oncogene products. p1079 2 Mar 1990.
Lührmann, Reinhard. *See* Heinrichs, Volker.
Luk, Ka-Cheung. *See* Reyes, Gregory R.
Lumsden, Andrew G. S. *See* Heffner, Christopher D.
Lunine, Jonathan I.: review of *Atmospheric Radiation*, by R. M. Goody and Y. L. Yung. p476 26 Jan 1990.
Lusso, Paolo; Veronese, Fulvia di Marzo; Ensoli, Barbara; Franchini, Genoveffa; Jemma, Cristina; DeRocco, Susan E.; Kalyanaraman, V. S.; Gallo, Robert C.: Expanded HIV-1 cellular tropism by phenotypic mixing with murine endogenous retroviruses. p848 16 Feb 1990.
Lyman, Suzanne. *See* Newman, Peter J.
Lynch, Gary. *See* Ambros-Ingerson, José.

M

Mac Dougall, James E. *See* Stucky, Galen D. *See also* Weisenhorn, A. L.
MacGillivray, Ross T. A. *See* Burch, Anita M.
Machesky, Laura M. *See* Goldschmidt-Clermont, Pascal J.
Maciag, Thomas: Organoids and genetic drugs (letter). p1530 30 Mar 1990.
Magasanik, Boris. *See* Fox, Maurice S.
Magnusson, Karl-Eric. *See* Lee, Juliet.
Mahoney, Richard J. and Littlejohn, Stephen E.: Punitive damages and innovation (letter). p1281 16 Mar 1990.
Maier-Rudolph, Willibald. *See* Daut, Jürgen.
Maione, Theodore E.; Gray, Gary S.; Petro, Joan; Hunt, Anthony J.; Donner, Amy L.; Bauer, Susan I.; Carson, Helen F.; Sharpe, Richard J.: Inhibition of angiogenesis by recombinant human platelet factor–4 and related peptides. p77 5 Jan 1990.
Maisonpierre, Peter C.; Belluscio, Leonardo; Squinto, Stephen; Ip, Nancy Y.; Furth, Mark E.; Lindsay, Ronald M.; Yancopoulos, George D.: Neurotrophin-3: a neurotrophic factor related to NGF and BDNF. p1446 23 Mar 1990.
Maivald, P. *See* Weisenhorn, A. L.
Malone, Robert W. *See* Wolff, Jon A.
Manabe, S. and Broccoli, A. J.: Mountains and arid climates of middle latitudes. p192 12 Jan 1990.
Mao, H. K. and Hemley, R. J.: Evidence for band overlap metallization of hydrogen (technical comment). p864 16 Feb 1990.
Marsden, C. David. *See* Lindvall, Olle.
Marshall, A. F. *See* Ramesh, R.
Marshall, Eliot (news): Academy panel raises radiation risk estimate. p22 5 Jan 1990. Academy sued on "plagiarized" diet report. p1022 2 Mar 1990. Counting on new nukes. p1024 2 Mar 1990. The fluoride debate: one more time. p276 19 Jan 1990. The geopolitics of R&D. p1023 2 Mar 1990. Malaria research—what next? p399 26 Jan 1990. Paleoanthropology gets physical. p798 16 Feb 1990. Penn charges Retin-A inventor with conflict. p1028 2 Mar 1990. Racemization dating: great expectations. p799 16 Feb 1990. Space planners brought down to earth. p1173 9 Mar 1990. USDA admits "mistake" in doctoring study. p522 2 Feb 1990. Who should study radiation effects? p1404 23 Mar 1990. (letter): Space shuttle advanced solid rocket motor testing. p904 23 Feb 1990.
Maruyama, Kazuo. *See* Itoh, Naoto.

Marx, Jean (news): Can nerve growth be detrimental? p409 26 Jan 1990. Concerns raised about mouse models for AIDS. p809 16 Feb 1990. Dissecting the complex diseases. p1540 30 Mar 1990. Fetal nerve grafts show promise in Parkinson's. p529 2 Feb 1990. From the tomato to the mouse. p1541 30 Mar 1990. NGF and Alzheimer's: hopes and fears. p408 26 Jan 1990.

Masaki, Tomoh. *See* Yoshizawa, Toshihiro.

Mason, Anthony J. *See* Gray, Alane M.

Mason, James O. and Bivens, Lyle W.: Scientific integrity (letter). p144 12 Jan 1990.

Massie, J. *See* Weisenhorn, A. L.

Matayoshi, Edmund D.; Wang, Gary T.; Krafft, Grant A.; Erickson, John: Novel fluorogenic substrates for assaying retroviral proteases by resonance energy transfer. p954 23 Feb 1990.

Matsubara, Rie; Toraya, Hideo; Tanaka, Satoshi; Sawamoto, Hiroshi: Precision lattice-parameter determination of (Mg,Fe)SiO_3 tetragonal garnets. p697 9 Feb 1990.

Matthews, Mark V. *See* Reasenberg, Paul A.

Mauk, A. Grant. *See* Burch, Anita M.

Mauk, Marcia R. *See* Burch, Anita M.

Mazumder, A.; Taylor, W. D.; McQueen, D. J.; Lean, D. R. S.: Effects of fish and plankton on lake temperature and mixing depth. p312 19 Jan 1990.

McBride, Heyoung L. *See* Trent, Jeffrey M.

McCann, John D. *See* Welsh, Michael J.

McCarron, Eugene M., III. *See* Gai, Pratibha L.

McCleliand, Gary M. *See* Farley, Francis W.

McCune, Joseph M.; Namikawa, Reiko; Shih, Chu-Chih; Rabin, Linda; Kaneshima, Hideto: Suppression of HIV infection in AZT-treated SCID-hu mice. p564 2 Feb 1990.

McDonald, D. G.: Superconductivity and the quantization of energy. p177 12 Jan 1990.

McGaughey, W. H. *See* Van Rie, J.

McKinney, Michael L.: review of *Mass Extinctions*, edited by Stephen K. Donovan. p475 26 Jan 1990.

McLafferty, Fred W.: Studies of unusual simple molecules by neutralization-reionization mass spectrometry. p925 23 Feb 1990.

McNeill, William H.: review of *Death by Migration*, by Philip D. Curtin. p474 26 Jan 1990.

McQuade, T. J.; Tomasselli, A. G.; Liu, L.; Karacostas, V.; Moss, B.; Sawyer, T. K.; Heinrikson, R. L.; Tarpley, W. G.: A synthetic HIV-1 protease inhibitor with antiviral activity arrests HIV-like particle maturation. p454 26 Jan 1990.

McQueen, D. J. *See* Mazumder, A.

Meech, Karen J. *See* Green, Daniel W. E.

Meehl, Paul E. *See* Faust, David.

Meese, Eckart U. *See* Trent, Jeffrey M.

Megee, Paul C.; Morgan, Brian A.; Mittman, Barbara A.; Smith, M. Mitchell: Genetic analysis of histone H4: essential role of lysines subject to reversible acetylation. p833 16 Feb 1990.

Mehrke, Gerhard. *See* Daut, Jürgen.

Menaker, Michael. *See* Ralph, Martin R.

Messier, Russell. *See* Yarbrough, Walter A.

Metsis, Madis. *See* Persson, Håkan.

Metzger, Joseph M. and Moss, Richard L.: Calcium-sensitive cross-bridge transitions in mammalian fast and slow skeletal muscle fibers. p1088 2 Mar 1990.

Michaeli, Tamar. *See* Field, Jeffrey.

Miklius, Asta. *See* Delaney, Paul T.

Milburn, Michael V.; Tong, Liang; deVos, Abraham M.; Brünger, Axel; Yamaizumi, Ziro; Nishimura, Susumu; Kim, Sung-Hou: Molecular switch for signal transduction: structural differences between active and inactive forms of protooncogenic *ras* proteins. p939 23 Feb 1990.

Milford, J. B. *See* Russell, A. G.

Milkman, Roger: review of *Gene Transfer in the Environment* by Stuart B. Levy and Robert V. Miller. p350 19 Jan 1990.

Miller, Christopher. *See* Richard, Edwin A.

Miller, Robert W. and Brent, Robert L.: Low-dose radiation exposure (letter). p1166 9 Mar 1990.

Mitrani, Eduardo and Shimoni, Yael: Induction by soluble factors of organized axial structures in chick epiblasts. p1092 2 Mar 1990.

Mittman, Barbara A. *See* Megee, Paul C.

Miura, H. *See* Wendoloski, J. J.

Miyajima, Atsushi. *See* Itoh, Naoto.

Mizoguchi, Akira. *See* Kawakami, Atsushi.

Mobbs, C. V.; Fink, G.; Pfaff, D. W.: HIP-70: a protein induced by estrogen in the brai and LH-RH in the pituitary. p1477 23 Mar 1990.

Moffat, Anne (news): Fiber fracas at FASEB. p1412 23 Mar 1990. "Rocking" on the banks of the Columbia River. p1413 23 Mar 1990.

Moldowan, J. Michael; Fago, Frederick J.; Lee, Cathy Y.; Jacobson, Stephen R.; Watt, David S.; Slougui, Nacer-Eddine; Jeganathan, Alwarsamy; Young, Donald C.: Sedimentary 24-*n*-propylcholestanes, molecular fossils diagnostic of marine algae. p309 19 Jan 1990.

Moody, William J. *See* Block, Melodye L.

Moore, Geoffrey R. *See* Burch, Anita M.

Morad, Martin. *See* Sorbera, Lisa Ann.

Morgan, Brian A. *See* Megee, Paul C.

Morris, Peter J. T.: review of *Synthetic Fuel Technology Development in the United States*, by Michael Crow, Barry Bozeman, Walter Meyer, and Ralph Shangraw, Jr. p1593 30 Mar 1990.

Morrow, Daniel G. *See* Bower, Gordon H.

Moser, Amy Rapaich; Pitot, Henry C.; Dove, William F.: A dominant mutation that predisposes to multiple intestinal neoplasia in the mouse. p322 19 Jan 1990.

Moss, B. *See* McQuade, T. J.

Moss, Richard L. *See* Metzger, Joseph M.

Mossman, B. T.; Bignon, J.; Corn, M.; Seaton, A.; Gee, J. B. L.: Asbestos: scientific developments and implications for public policy. p294 19 Jan 1990.

Muller, Alexander J. *See* Lugo, Tracy G.

Muller, William A. *See* Newman, Peter J.

Murphy, Kenneth P.; Privalov, Peter, L.; Gill, Stanley J.: Common features of protein unfolding and dissolution of hydrophobic compounds. p559 2 Feb 1990.

Muschel, Louis H.: The genome project: pro and con (letter). p270 19 Jan 1990.

Mustelin, T.; Coggeshall, K. M.; Isakov, N.; Altman, A.: T cell antigen receptor–mediated activation of phospholipase C requires tyrosine phosphorylation. p1584 30 Mar 1990.

Myslinski, Evelyne; Ségault, Véronique; Branlant, Christiane: An intron in the genes for U3 small nucleolar RNAs of the yeast *Saccharomyces cerevisiae*. p1213 9 Mar 1990.

N–P

Nabavi, Nasrin. *See* Liou, Hsiou-Chi.

Nagasawa, Hiromichi. *See* Kawakami, Atsushi.

Nagle, Raymond B. *See* Trent, Jeffrey M.

Nakamura, Takanori; Takio, Koji; Eto, Yuzuru; Shibai, Hiroshiro; Titani, Koiti; Sugino, Hiromu: Activin-binding protein from rat ovary is follistatin. p836 16 Feb 1990.

Namikawa, Reiko. *See* McCune, Joseph M.

Nance, John: The Tasaday debate (letter). p790 16 Feb 1990.

Nazar, L. *See* Ramesh, R.

Nelbock, Peter. *See* Olsen, Henrik S.

Nelson, Keith A. *See* Weiner, A. M.

Nelson, Thomas J.; Collin, Carlos; Alkon, Daniel L.: Isolation of a G protein that is modified by learning and reduces potassium currents in *Hermissenda*. p1479 23 Mar 1990.

Neupert, Walter. *See* Hartl, Franz-Ulrich.

Neurath, Hans: NIH budget crisis (letter). p394 26 Jan 1990.

Newman, Peter J.; Berndt, Michael C.; Gorski, Jack; White, Gilbert C., II; Lyman, Suzanne; Paddock, Cathy; Muller, William A.: PECAM-1 (CD31) cloning and relation to adhesion molecules of the immunoglobulin gene superfamily. p1219 9 Mar 1990.

Nicklas, Janice A. *See* Allegretta, Mark.

Niederhuber, John E. *See* Dymecki, Susan M.

Nielsen, Elsebet Ø. *See* Sheardown, Malcolm J.

Nierenberg, William A.: Global warming report (letter). p14 5 Jan 1990.

Nigro, Janice M. *See* Fearon, Eric R.

Nishimura, Susumu. *See* Milburn, Michael V.

Nobre, C. *See* Shukla, J.

Nocka, Karl. *See* Tan, Jimmy C.

Norman, Colin (news): Army, Air Force eye SDI spinoffs. p1284 16 Mar 1990. Bush budget highlights R&D. p517 2 Feb 1990. Bush names science committee. p629 9 Feb 1990. Defense research after the Cold War. p272 19 Jan 1990. How the Soviets got the H-bomb. p151 12 Jan 1990. MIT tenure case heads for trial. p1536 30 Mar 1990. Science indicators: healthy . . . for now. p803 16 Feb 1990. SDI heads for fiscal crash. p1283 16 Mar 1990. The ups and downs of strategic defense weapons. p1285 16 Mar 1990.

Obeysekare, Upul R. *See* Pabo, Carl O.

Offord, James. *See* Scheuer, Todd.

Ojeda, Carlos. *See* Picard, André.

Oka, Tadanori. *See* Kawakami, Atsushi.

Okamura, Arnold T. *See* Delaney, Paul T.

O'Leary, Dennis D. M. *See* Heffner, Christopher D.

Olney, J. W.; Labruyere, J.; Price, M. T.: Phencyclidine, dizocilpine, and cerebrocortical neurons (technical comment). p221 12 Jan 1990.

Olsen, Henrik S.; Nelbock, Peter; Cochrane, Alan W.; Rosen, Craig A.: Secondary structure is the major determinant for interaction of HIV *rev* protein with RNA. p845 16 Feb 1990.

Olson, Lars. *See* Persson, Håkan.

Orenstein, J. *See* Greene, B. I.

Oshimura, Mitsuo. *See* Sugawara, Osamu.

Ostell, James: review of *Biomelecular Data*, edited by Rita R. Colwell, David G. Swartz, and Michael T. Macdonell. p226 12 Jan 1990.

Owen, Thomas A. *See* Holthuis, Joost.

Pabo, Carl O.; Aggarwal, Aneel K.; Jordan, Steven R.; Beamer, Lesa J.; Obeysekare, Upul R.; Harrison, Stephen C.: Conserved residues make similar contacts in two repressor-operator complexes. p1210 9 Mar 1990.

Paddock, Cathy. *See* Newman, Peter J.

Palca, Joseph (news): AAAS rides electronic wave. p1024 2 Mar 1990. Article on Gallo prompts inquiry. p19 5 Jan 1990. BITNET headed for new frontiers. p520 2 Feb 1990. Dallas AIDS survey raises expectations. p1023 2 Mar 1990. Fetal research ban on shaky ground? p629 9 Feb 1990. Getting to the heart of the cholesterol debate. p1170 9 Mar 1990. NIH conflict-of-interest guidelines shot down. p154 12 Jan 1990. Old law puts a new wrinkle in fraud probes. p802 16 Feb 1990. Shooting at a new HIV target. p410 26 Jan 1990. Soviet reforms: promises, promises. p1025 2 Mar 1990. Trials and tribulations of AIDS drug

testing. p1406 23 Mar 1990. U.S. math: not asking much. p1025 2 Mar 1990. Why statistics may understate the risk of heart disease. p1171 9 Mar 1990. (letter): NIH budget crisis. p394 26 Jan 1990.
Palmer, Ed. *See* Woodland, David.
Palmiter, Richard D. *See* Ryan, Thomas M.
Parcel, Toby L.: review of *Doing Comparable Worth*, by Joan Acker. p91 5 Jan 1990.
Parkin, Neil T. *See* Roy, Sophie.
Patino, Maria M. *See* Lin, Jih-Jing.
Pawson, Tony. *See* Kazlauskas, Andrius.
Pendergast, Ann-Marie. *See* Lugo, Tracy G.
Peng, Songzhi. *See* Blachly-Dyson, Elizabeth.
Perin, Romeo V.: SSC magnet development (letter). p790 16 Feb 1990.
Perry, Alfred M. *See* Fulkerson, William.
Persson, Håkan; Ayer–Le Lievre, Christiane; Söder, Olof; Villar, Marcelo J.; Metsis, Madis; Olson, Lars; Ritzen, Martin; Hökfelt, Tomas: Expression of β-nerve growth factor receptor mRNA in Sertoli cells downregulated by testosterone. p704 9 Feb 1990.
Petersilia, Joan. *See* Klein, Stephen.
Petro, Joan. *See* Maione, Theodore E.
Pfaff, D. W. *See* Mobbs, C. V.
Pfeffer, M. Raphael. *See* Teicher, Beverly A.
Philibert, Daniel and Teutsch, Georges: RU 486 development (letter). p622 9 Feb 1990.
Phillips, Richard J. *See* Switzer, Jay A.
Picard, André; Cavadore, Jean-Claude; Lory, Philippe; Bernengo, Jean-Claude; Ojeda, Carlos; Dorée, Marcel: Microinjection of a conserved peptide sequence of p34^{cdc2} induces a Ca^{2+} transient in oocytes. p327 19 Jan 1990.
Pisano, Gary P.: review of *Gene Dreams*, by Robert Teitelman. p1241 9 Mar 1990.
Pitot, Henry C. *See* Moser, Amy Rapaich.
Poggio, T. and Girosi, F.: Regularization algorithms for learning that are equivalent to multilayer networks. p978 23 Feb 1990.
Polak, Julia M. *See* Yoshizawa, Toshihiro.
Pollack, J. B. *See* Turco, R. P.
Pollard, Thomas D. *See* Goldschmidt-Clermont, Pascal J.
Pool, Robert (news): Anyon superconductivity? p1410 23 Mar 1990. At long last, will electrorheological fluids compute? p1181 9 Mar 1990. Brrr! how cold is it? p1411 23 Mar 1990. The chase continues for metallic hydrogen. p1545 30 Mar 1990. The children of the STM. p634 9 Feb 1990. Electricity by serendipity. p1034 2 Mar 1990. Feud flares over thallium superconductor. p1029 2 Mar 1990. The fluids with a case of split personality. p1180 9 Mar 1990. Heart like a wheel. p1294 16 Mar 1990. New lightest aerogel is nothing to look at. p807 16 Feb 1990. 101 uses for tiny tubules. p1410 23 Mar 1990. Pushing the envelope of life. p158 12 Jan 1990. A small revolution gets under way. p26 5 Jan 1990. The third kingdom of life. p159 12 Jan 1990. Tweaking molecules with laser light. p1295 16 Mar 1990. Understanding the simplest reaction. p413 26 Jan 1990.
Porter, Alain C. *See* Green, Daniel W. E.
Pouysségur, J. *See* Sardet, C.
Powell, Doug (news): How is basic science faring in Canada? p1172 9 Mar 1990.
Preisinger, Antonette C. *See* Fearon, Eric R.
Price, C. A.: review of *The Biology of* Euglena, edited by Dennis E. Buetow. p866 16 Feb 1990.
Price, M. T. *See* Olney, J. W.
Privalov, Peter, L. *See* Murphy, Kenneth P.
Prothero, John W. *See* Galliant, Jonathan A.
Ptashne, Mark. *See* Carey, Michael.
Purdy, Michael A. *See* Reyes, Gregory R.

R

Rabin, Linda. *See* McCune, Joseph M.
Radick, Richard R.; Lockwood, G. W.; Baliunas, Sallie L.: Stellar activity and brightness variations: a glimpse at the sun's history. p39 5 Jan 1990.
Ralls, Katherine: review of *Conservation for the Twenty-First Century*, edited by David Western and Mary C. Pearl. p224 12 Jan 1990.
Ralph, Martin R.; Foster, Russell G.; Davis, Fred C.; Menaker, Michael: Transplanted suprachiasmatic nucleus determines circadian period. p975 23 Feb 1990.
Ramesh, R.; Hwang, D. M.; Venkatesan, T.; Ravi, T. S.; Nazar, L.; Inam, A.; Wu, X. D.; Dutta, B.; Thomas, G.; Marshall, A. F.; Geballe, T. H.: Direct observation of structural defects in laser-deposited superconducting Y-Ba-Cu-O thin films. p57 5 Jan 1990.
Rammensee, Hans-George. *See* Schild, Hansjörg.
Ramsey-Ewing, Anna. *See* Holthuis, Joost.
Randall, Robert L.: Punitive damages and innovation (letter). p1281 16 Mar 1990.
Ravi, T. S. *See* Ramesh, R.
Ray, Prabir. *See* Tan, Jimmy C.
Ream, Kathleen A.: Patent court scientist (letter). p1530 30 Mar 1990.
Reasenberg, Paul A. and Jones, Lucile M.: California aftershock hazard forecasts (technical comment). p345 19 Jan 1990.
Reasenberg, Paul A. and Matthews, Mark V. California aftershock model uncertainties. p343 19 Jan 1990.
Redondo, Juan Miguel; Hata, Shingo; Brocklehurst, Cathy; Krangel, Michael S.: A T cell–specific transcriptional enhancer within the human T cell receptor δ locus. p1225 9 Mar 1990.
Rees, Martin J.: "Dead quasars" in nearby galaxies? p817 16 Feb 1990.
Rehncrona, Stig. *See* Lindvall, Olle.
Reichert, Leo E., Jr. *See* Boniface, J. Jay.
Reidhaar-Olson, John F. *See* Bowie, James U.
Reilly, Michael P. *See* Ryan, Thomas M.
Reilly, Patricia. *See* Wegner, Craig D.
Reister, David B. *See* Fulkerson, William.
Rensink, Ronald A. *See* Enns, James T.
Retallack, Gregory J.; Dugas, D. P.; Bestland, E. A.: Fossil soils and grasses of a middle Miocene East African grassland. p1325 16 Mar 1990.
Reyes, Gregory R.; Purdy, Michael A.; Kim, Jungsuh P.; Luk, Ka-Cheung; Young, La-Vonne M.; Fry, Kirk E.; Bradley, Daniel W.: Isolation of a cDNA from the virus responsible for enterically transmitted non–A, non–B hepatitis. p1335 16 Mar 1990.
Reynolds, James F. *See* Schlesinger, William H.
Rhee, Sue Goo. *See* Smith, Mark R.
Richard, Edwin A. and Miller, Christopher: Steady-state coupling of ion-channel conformations to a transmembrane ion gradient. p1191 9 Mar 1990.
Rickman, Hans. *See* Green, Daniel W. E.
Rigby, Stephen E. J. *See* Burch, Anita M.
Rilling, H. C.; Breunger, E.; Epstein, W. W.; Crain, P. F.: Prenylated proteins: the structure of the isoprenoid group. p318 19 Jan 1990.
Ritzen, Martin. *See* Persson, Håkan.
Roberts, Leslie (news): CF screening delayed for awhile, perhaps forever. p1296 16 Mar 1990. Huntington's gene: so near, yet so far. p624 9 Feb 1990. One worked; the other didn't. p18 5 Jan 1990. Risk assessors taken to task. p1173 9 Mar 1990. Three steps forward, two steps backward. p626 9 Feb 1990. To test or not to test? p17 5 Jan 1990. U.S. lags on birth control development. p909 23 Feb 1990. Whatever happened to the genetic map? p281 19 Jan 1990. (letter): Global warming report. p16 5 Jan 1990.
Robinson, Harriet L. and Somasundaran, Mohan: Correction: copy numbers of HIV-1 RNA (letter). p1531 30 Mar 1990.
Rodman, Hillary R. *See* Colombo, Michael.
Rohrbaugh, Wayne J. *See* Lawton, Stephen L.
Roll-Hansen, Nils: review of *Science in Sweden*, edited by Töre Frangsmyr. p582 2 Feb 1990.
Rosen, Craig A. *See* Olsen, Henrik S.
Rosenfeld, Michael G. *See* Wells, Alan.
Rosengarten, Renate and Wise, Kim S.: Phenotypic switching in mycoplasmas: phase variation of diverse surface lipoproteins. p315 19 Jan 1990.
Rosenzweig, Robert M.: Grant financing: PI salaries (letter). p1385 23 Mar 1990.
Ross, John. *See* Lazar, James G.
Rossi, Harald H.: Low-dose radiation exposure (letter). p1166 9 Mar 1990.
Rossi, John J. *See* Sarver, Nava.
Rossier, Jean. *See* Eddé, Bernard.
Rothlein, Robert. *See* Wegner, Craig D.
Rothwell, John C. *See* Lindvall, Olle.
Rötzschke, Olaf. *See* Schild, Hansjörg.
Roy, Sophie; Katze, Michael G.; Parkin, Neil T.; Edery, Isaac; Hovanessian, Ara G.; Sonenberg, Nahum: Control of the interferon-induced 68-kilodalton protein kinase by the HIV-1 *tat* gene product. p1216 9 Mar 1990.
Ruppert, J. Michael. *See* Fearon, Eric R.
Rushton, J. Philippe: Shockley: a scholar (letter). p905 23 Feb 1990.
Russell, A. G.; St. Pierre, D.; Milford, J. B.: Ozone control and methanol fuel use. p201 12 Jan 1990.
Rutter, William J.: Takeover bid: Chiron's discussions with the media (letter). p1530 30 Mar 1990.
Ryan, Thomas M.; Townes, Tim M.; Reilly, Michael P.; Asakura, Toshio; Palmiter, Richard D.; Brinster, Ralph L.; Behringer, Richard R.: Human sickle hemoglobin in transgenic mice. p566 2 Feb 1990.
Rydelek, Paul A.: California aftershock model uncertainties (technical comment). p343 19 Jan 1990.

S

Sachs, A. B. and Davis, R. W.: Translation initiation and ribosomal biogenesis: involvement of a putative rRNA helicase and RPL46. p1077 2 Mar 1990.
Sagan, C. *See* Turco, R. P.
Sako, Maurice K. *See* Delaney, Paul T.
Sala, Francisco. *See* Hernández-Cruz, Arturo.
Salaün, Josselyne; Bandeira, Antonio; Khazaal, Ibrahim; Calman, Françoise; Coltey, Monique; Coutinho, Antonio; Le Douarin, Nicole M.: Thymic epithelium tolerizes for histocompatibility antigens. p1471 23 Mar 1990.
Sánchez, Rodolfo A. *See* Ballaré, Carlos L.
Sardet, C.; Counillon, L.; Franchi, A.; Pouysségur, J.: Growth factors induce phosphorylation of the Na^+/H^+ antiporter, a glycoprotein of 110 kD. p723 9 Feb 1990.
Sarkar, Gobinda: DNA fingerprinting (letter). p1018 2 Mar 1990.
Sarver, Nava; Cantin, Edouard M.; Chang, Pairoj S.; Zaia, John A.; Ladne, Paula A.; Stephens, Delilah A.; Rossi, John J.: Ribozymes as potential anti–HIV-1 therapeutic agents. p1222 9 Mar 1990.
Sass, Philip. *See* Field, Jeffrey.
Sauer, Robert T. *See* Bowie, James U.
Saunders, Lorraine P. *See* Sempowski, Martha L.
Sawamoto, Hiroshi. *See* Matsubara, Rie.

Sawle, Guy. *See* Lindvall, Olle.
Sawyer, T. K. *See* McQuade, T. J.
Sayer, M. and Sreenivas, K.: Ceramic thin films: fabrication and applications. p1056 2 Mar 1990.
Schacter, Daniel L. *See* Tulving, Endel.
Scheman, Carol R.: NIH budget crisis (letter). p393 26 Jan 1990.
Scheuer, Todd; Auld, Vanessa J.; Boyd, Shelley; Offord, James; Dunn, Robert; Catterall, William A.: Functional properties of rat brain sodium channels expressed in a somatic cell line. p854 16 Feb 1990.
Schild, Hansjörg; Rötzschke, Olaf; Kalbacher, Hubert; Rammensee, Hans-George: Limit of T cell tolerance to self proteins by peptide presentation. p1587 30 Mar 1990.
Schiller, P. H. *See* Logothetis, N. K.
Schlesinger, William H.; Reynolds, James F.; Cunningham, Gary L.; Huenneke, Laura F.; Jarrell, Wesley M.; Virginia, Ross A.; Whitford, Walter G.: Biological feedbacks in global desertification. p1043 2 Mar 1990.
Schmid-Antomarchi, Heidy. *See* Amoroso, Salvatore.
Schmitt-Rink, S. *See* Greene, B. I.
Schreurs, Jolanda. *See* Itoh, Naoto.
Schuster, Heike. *See* Gerhardt, Martin.
Schutz, Bernard F.: review of *Frontiers in Numerical Relativity*, edited by Charles R. Evans, Lee S. Finn, and David W. Hobill. p1128 2 Mar 1990.
Schwartz, William B. *See* Aaron, Henry.
Scopel, Ana L. *See* Ballaré, Carlos L.
Scully, Peter. *See* Bookstein, Robert.
Seaton, A. *See* Mossman, B. T.
Ségault, Véronique. *See* Myslinski, Evelyne.
Sellers, P. *See* Shukla, J.
Semmes, Oliver J., IV. *See* Jeang, Kuan-Teh.
Sempowski, Martha L.; Saunders, Lorraine P.; Bradley, James W.: New world epidemics (letter). p788 16 Feb 1990.
Servos, John W.: review of *The Michelson Era in American Science, 1870–1930*, edited by Stanley Goldberg and Roger H. Stuewer. p985 23 Feb 1990.
Seshadri, Tara and Campisi, Judith: Repression of c-*fos* transcription and an altered genetic program in senescent human fibroblasts. p205 12 Jan 1990.
Shafer, Glenn R.: review of *The Empire of Chance*, by Gerd Gigerenzer, Zeno Swijtink, Theodore Porter, Lorraine Daston, John Beatty, and Lorenz Krüger. p225 12 Jan 1990.
Shane, Michael J. *See* Switzer, Jay A.
Sharpe, Richard J. *See* Maione, Theodore E.
Sheardown, Malcolm J.; Nielsen, Elsebet Ø.; Hansen, Anker J.; Jacobsen, Poul; Honoré, Tage: 2,3-Dihydroxy-6-nitro-7-sulfamoyl-benzo(F)quinoxaline: a neuroprotectant for cerebral ischemia. p571 2 Feb 1990.
Shew, Jin-Yuh. *See* Bookstein, Robert.
Shibai, Hiroshiro. *See* Nakamura, Takanori.
Shih, Chu-Chih. *See* McCune, Joseph M.
Shimoni, Yael. *See* Mitrani, Eduardo.
Shinmi, Osamu. *See* Yoshizawa, Toshihiro.
Shippen-Lentz, Dorothy and Blackburn, Elizabeth H.: Functional evidence for an RNA template in telomerase. p546 2 Feb 1990.
Shukla, J.; Nobre, C.; Sellers, P.: Amazon deforestation and climate change. p1322 16 Mar 1990.
Siekevitz, Philip: NIH conflict-of-interest guidelines (letter). p516 2 Feb 1990.
Signer, Ethan R. *See* Fox, Maurice S.
Silvera Isaac F.: Evidence for band overlap metallization of hydrogen (technical comment). p863 16 Feb 1990.
Simons, Elwyn L.: Discovery of the oldest known anthropoidean skull from the Paleogene of Egypt. p1567 30 Mar 1990.
Simons, Jonathan W. *See* Fearon, Eric R.
Sinclair, Warren K.: BEIR V: Implications for the nuclear workforce (letter). p621 9 Feb 1990.
Skinner, C. H. *See* Suckewer, S.
Slougui, Nacer-Eddine. *See* Moldowan, J. Michael.
Smith, Gerard P. *See* Weller, Aron.
Smith, M. Mitchell. *See* Megee, Paul C.
Smith, Mark R.; Liu, Ya-lun; Kim, Hyun; Rhee, Sue Goo; Kung, Hsiang-fu: Inhibition of serum- and Ras-stimulated DNA synthesis by antibodies to phospholipase C. p1074 2 Mar 1990.
Smith, Stephen J. *See* Cornell-Bell, Ann H.
Snow, David A. and Anderson, Leon: review of *Down and Out in America*, by Peter H. Rossi. p1485 23 Mar 1990.
Söder, Olof. *See* Persson, Håkan.
Sofroniew, Michael V.; Galletly, Neil P.; Isacson, Ole; Svendsen, Clive N.: Survival of adult basal forebrain cholinergic neurons after loss of target neurons. p338 19 Jan 1990.
Solc, Charles K. *See* Wine, Jeffrey J.
Solomon, Barry D. and Adler, Michael J.: Global warming (letter). p620 9 Feb 1990.
Solomon, Frank. *See* Fox, Maurice S.
Somasundaran, Mohan. *See* Robinson, Harriet L.
Sonenberg, Nahum. *See* Roy, Sophie.
Soprano, Kenneth J. *See* Holthuis, Joost.
Sorbera, Lisa Ann and Morad, Martin: Atrionatriuretic peptide transforms cardiac sodium channels into calcium-conducting channels. p969 23 Feb 1990.
Spahr, S. L.: Milk products: surplus or shortage? (letter). p1167 9 Mar 1990.
Spencer, Robert H. *See* Chandy, K. George.
Spencer, Roy W. and Christy, John R. (news): Precise monitoring of global temperature trends from satellites. p1410 23 Mar 1990.
Spero, Howard J.: review of *Modern Planktonic Foraminifera*, by Ch. Hemleben, M. Spindler, and O. R. Anderson. p225 12 Jan 1990.
Squinto, Stephen. *See* Maisonpierre, Peter C.
Sreenivas, K. *See* Sayer, M.
Sriram, Subramaniam. *See* Allegretta, Mark.
St. Pierre, D. *See* Russell, A. G.
Stafford, Helen A.: review of *Plant Cell Wall Polymers*, edited by Norman G. Lewis and Michael G. Paice. p476 26 Jan 1990.
Standbridge, Eric J.: Identifying tumor suppressor genes in human colorectal cancer. p12 5 Jan 1990. *See also* Trent, Jeffrey M.
Starr, Michel; Himmelman, John H.; Therriault, Jean-Claude: Direct coupling of marine invertebrate spawning with phytoplankton blooms. p1067 2 Mar 1990.
Stein, Gary S. *See* Holthuis, Joost.
Stein, Janet L. *See* Holthuis, Joost.
Stephens, Delilah A. *See* Sarver, Nava.
Strauss, Janet. *See* Allan, Jonathan S.
Strauss, Richard E. *See* Houck, Marilyn A.
Stucky, Galen D. *See* Weisenhorn, A. L.
——— and Mac Dougall, James E.: Quantum confinement and host/guest chemistry: probing a new dimension. p669 9 Feb 1990.
Stuiver, Minze: Global warming report (letter). p15 5 Jan 1990.
Suchman, Peter O. *See* Litan, Robert E.
Suckewer, S. and Skinner, C. H.: Soft x-ray lasers and their applications. p1553 30 Mar 1990.
Sugawara, Osamu; Oshimura, Mitsuo; Koi, Minoru; Annab, Lois A.; Barrett, J. Carl: Induction of cellular senescence in immortalized cells by human chromosome 1. p707 9 Feb 1990.
Sugino, Hiromu. *See* Nakamura, Takanori.
Sun, J. Z.; Lairson, B.; Eom, C. B.; Bravman, J.; Geballe, T. H.: Elimination of current dissipation in high transition temperature superconductors. p307 19 Jan 1990.
Sun, Marjorie (news): Emissions trading goes global. p520 2 Feb 1990. Hearing on lab vandalism. p801 16 Feb 1990. How do you measure the Lovejoy effect? p1174 9 Mar 1990. Imported monkey puzzle. p1538 30 Mar 1990.
Suslick, Kenneth S. *See* Doktycz, Stephen J.
———: Sonochemistry. p1439 23 Mar 1990.
Susskind, Charles: review of *My Life With the Printed Circuit*, by Paul Eisler. p986 23 Feb 1990.
Suzuki, Akinori. *See* Kawakami, Atsushi.
Suzuki, Carolyn K. *See* Bonifacino, Juan S.
Svendsen, Clive N. *See* Sofroniew, Michael V.
Swan, H. T.: The antibiotic record (letter). p1387 23 Mar 1990.
Switzer, Jay A.; Shane, Michael J.; Phillips, Richard J.: Electrodeposited ceramic superlattices. p444 26 Jan 1990.
Szuromi, Phillip (news): Ceramic membranes. p283 19 Jan 1990. CO_2 in space. p283 19 Jan 1990. Getting the blues. p283 19 Jan 1990. Mountain in the sea. p283 19 Jan 1990. Reaching for the ring. p283 19 Jan 1990.
Szwergold, Benjamin S.; Kappler, Francis; Brown, Truman R.: Identification of fructose 3-phosphate in the lens of diabetic rats. p451 26 Jan 1990.

T

Takahashi, Taro. *See* Tans, Pieter P.
Takio, Koji. *See* Nakamura, Takanori.
Tan, Jimmy C.; Nocka, Karl; Ray, Prabir; Traktman, Paula; Besmer, Peter: The dominant W^{42} *spotting* phenotype results from a missense mutation in the c-*kit* receptor kinase. p209 12 Jan 1990.
Tanaka, Satoshi. *See* Matsubara, Rie.
Tang, Chieh-ju Chang. *See* Lichter, Peter.
Tans, Pieter P.; Fung, Inez Y.; Takahashi, Taro: Observational constraints on the global atmospheric CO_2 budget. p1431 23 Mar 1990.
Tao, Terence; Gong, Bang-Jian; Leavis, Paul C.: Calcium-induced movement of troponin-I relative to actin in skeletal muscle thin filaments. p1322 16 Mar 1990.
Tarpley, W. G. *See* McQuade, T. J.
Taylor, David Winship and Hickey, Leo J.: An Aptian plant with attached leaves and flowers: implications for angiosperm origin. p702 9 Feb 1990.
Taylor, Jack A.: Cone loss of the week (letter). p270 19 Jan 1990.
Taylor, W. D. *See* Mazumder, A.
Teich, Albert H.: NIH budget crisis (letter). p394 26 Jan 1990.
Teicher, Beverly A.; Herman, Terence S.; Holden, Sylvia A.; Wang, Yenyun; Pfeffer, M. Raphael; Crawford, James W.; Frei, Emil, III: Tumor resistance to alkylating agents conferred by mechanisms operative only in vivo. p1457 23 Mar 1990.
Tempel, Bruce L. *See* Chandy, K. George.
Temple, Stanley A.: review of *Where Have All the Birds Gone?* by John Terborgh. p1128 2 Mar 1990.
Teutsch, Georges. *See* Philibert, Daniel.
Teyke, Thomas; Weiss, Klaudiusz R.; Kupfermann, Irving: An identified neuron (CPR) evokes neuronal responses reflecting food arousal in *Aplysia*. p85 5 Jan 1990.
Thach, Robert E. *See* Lin, Jih-Jing.
Therriault, Jean-Claude. *See* Starr, Michel.

Thomas, G. *See* Ramesh, R.
Thomas, Giles. *See* Fearon, Eric R.
Ting, Jenny P.-Y. *See* Liou, Hsiou-Chi.
Titani, Koiti. *See* Nakamura, Takanori.
Tobias, Phillip V. *See* Conroy, Glenn C.
Todd, Edmund N.: review of *An Institute for an Empire*, by David Cahan. p1242 9 Mar 1990.
Tomasselli, A. G. *See* McQuade, T. J.
Tong, Liang. *See* Milburn, Michael V.
Toon, O. B. *See* Turco, R. P.
Toraya, Hideo. *See* Matsubara, Rie.
Torrey, Barbara Boyle and Kingkade, W. Ward: Population dynamics of the United States and the Soviet Union. p1548 30 Mar 1990.
Townes, Tim M. *See* Ryan, Thomas M.
Traktman, Paula. *See* Tan, Jimmy C.
Traub, Wesley A.; Johnson, David G.; Chance, Kelly V.: Stratospheric hydroperoxyl measurements. p446 26 Jan 1990.
Trent, Jeffrey M.; Stanbridge, Eric J.; McBride, Heyoung L.; Meese, Eckart U.; Casey, Graham; Araujo, Diana E.; Witkowski, Colette M.; Nagle, Raymond B.: Tumorigenicity in human melanoma cell lines controlled by introduction of human chromosome 6. p568 2 Feb 1990.
Tulving, Endel and Schacter, Daniel L.: Priming and human memory systems. p301 19 Jan 1990.
Turco, R. P.; Toon, O. B.; Ackerman, T. P.; Pollack, J. B.; Sagan, C.: Climate and smoke: an appraisal of nuclear winter. p166 12 Jan 1990.
Turner, Susan. *See* Klein, Stephen.
Tyson, John J. *See* Gerhardt, Martin.

U–W

Uchiyama, Yasuo. *See* Yoshizawa, Toshihiro.
U.S. Geological Survey Staff: The Loma Prieta, California, earthquake: an anticipated event. p286 19 Jan 1990.
Van Etten, Richard A. *See* Daley, George Q.
van Wijnen, André J. *See* Holthuis, Joost.
Van Mellaert, H. *See* Van Rie, J.
Vannier, Michael W. *See* Conroy, Glenn C.
Van Rie, J.; McGaughey, W. H.; Johnson, D. E.; Barnett, B. D.; Van Mellaert, H.: Mechanism of insect resistance to the microbial insecticide *Bacillus thuringiensis*. p72 5 Jan 1990.
Varadhan, S. R. S.: review of *Large Deviations*, by Jean-Dominique Deuschel and Daniel W. Stroock. p1351 16 Mar 1990.
Veis, Arthur: review of *Biomineralization*, by Kenneth Simkiss and Karl M. Wilbur, and *On Biomineralization*, by Heinz A. Lowenstam and Stephen Weiner. p1129 2 Mar 1990.
Venkatesan, T. *See* Ramesh, R.
Veronese, Fulvia di Marzo. *See* Lusso, Paolo.
Villar, Marcelo J. *See* Persson, Håkan.
Virginia, Ross A. *See* Schlesinger, William H.
Vogelstein, Bert. *See* Fearon, Eric R.
von Beckerath, Nikolas. *See* Daut, Jürgen.
Wagner, David H.: review of *The Politics of Knowledge*, by Lily M. Hoffman. p347 19 Jan 1990.
Walden, William E. *See* Lin, Jih-Jing.
Waldrop, M. Mitchell (news): Asking for the moon. p637 9 Feb 1990 COBE confronts cosmic conundrums. p411 26 Jan 1990. Hubble Space Telescope takes aim at the stars. p1546 30 Mar 1990. Looking forward to Hubble. p412 26 Jan 1990. New telescope opens for business. p917 23 Feb 1990. Particle physicists look to the heavens. p1291 16 Mar 1990. The puzzling pulsar that wasn't there. p910 23 Feb 1990. The reign of trial and error draws to a close. p28 5 Jan 1990. The return of cold dark matter. p638 9 Feb 1990. Spontaneous orders, evolution, and life. p1543 30 Mar 1990. What you find when looking for a soccer ball. p161 12 Jan 1990.
Walsh, Christopher T. *See* Helmann, John D.
Walsh, John (news): In Peru, even potato research is high risk. p1286 16 Mar 1990.
Wang, Gary T. *See* Matayoshi, Edmund D.
Wang, Yenyun. *See* Teicher, Beverly A.
Ward, David C. *See* Lichter, Peter.
Warren, Donald: review of *And Sadly Teach*, by Jurgen Herbst. p90 5 Jan 1990.
Wassersug, Richard: review of *Complex Organismal Functions*, edited by D. B. Wake and G. Roth. p1350 16 Mar 1990.
Watt, David S. *See* Moldowan, J. Michael.
Weaver, James C. and Astumian, R. Dean: The response of living cells to very weak electric fields: the thermal noise limit. p459 26 Jan 1990.
Wegner, Craig D.; Gundel, Robert H.; Reilly, Patricia; Haynes, Nancy; Letts, L. Gordon; Rothlein, Robert: Intercellular adhesion molecule–1 (ICAM-1) in the pathogenesis of asthma. p456 26 Jan 1990.
Weiner, A. M.; Leaird, D. E.; Wiederrecht, Gary P.; Nelson, Keith A.: Femtosecond pulse sequences used for optical manipulation of molecular motion. p1317 16 Mar 1990.
Weisenhorn, A. L.; Mac Dougall, J. E.; Gould, S. A. C.; Cox, S. D.; Wise, W. S.; Massie, J.; Maivald, P.; Elings, V. B.; Stucky, G. D.; Hansma, P. K.: Imaging and manipulating molecules on a zeolite surface with an atomic force microscope. p1330 16 Mar 1990.
Weiss, J. H.; Hartley, D. M.; Koh, J.; Choi, D. W.: The calcium channel blocker nifedipine attenuates slow excitatory amino acid neurotoxicity. p1474 23 Mar 1990.
Weiss, Klaudiusz R. *See* Teyke, Thomas.
Weller, Aron; Smith, Gerard P.; Gibbs, James: Endogenous cholecystokinin reduced feeding in young rats. p1589 30 Mar 1990.
Wells, Alan; Welsh, John B.; Lazar, Cheri S.; Wiley, H. Steven; Gill, Gordon N.; Rosenfeld, Michael G.: Ligand-induced transformation by a noninternalizing epidermal growth factor receptor. p962 23 Feb 1990.
Wells, James A. *See* Cunningham, Brian C.
Welsh, John B. *See* Wells, Alan.
Welsh, Michael J.; McCann, John D.; Li, Ming; Clancy, John P.; Anderson, Matthew P.: Chloride channels in cystic fibrosis patients (technical comment). p222 12 Jan 1990.
Wendoloski, J. J.; Gardner, K. H.; Hirschinger, J.; Miura, H.; English, A. D.: Molecular dynamics in ordered structures: computer simulation and experimental results for nylon 66 crystals. p431 26 Jan 1990.
Wessler, Susan R. *See* Ludwig, Steven R.
Westney, D. Eleanor: review of *The Formation of Science in Japan*, by James R. Bartholomew. p223 12 Jan 1990.
Wetherill, George W.: Asteroid paradox (letter). p1386 23 Mar 1990.
Wheaton, Bruce: review of *The Space Telescope*, by Robert W. Smith, and *The Space Telescope*, by George Field and Donald Goldsmith. p1240 9 Mar 1990.
White, Gilbert C., II. *See* Newman, Peter J.
Whitford, Walter G. *See* Schlesinger, William H.
Widen, Steven G. *See* Jeang, Kuan-Teh.
Widner, Håkan. *See* Lindvall, Olle.
Wiederrecht, Gary P. *See* Weiner, A. M.
Wierman, John: review of *Percolation*, by Geoffrey Grimmett. p351 19 Jan 1990.
Wigler, Michael. *See* Field, Jeffrey.
Wiley, H. Steven. *See* Wells, Alan.
Williams, Calvin B. *See* Chandy, K. George.
Williams, Phillip. *See* Wolff, Jon A.
Williams, Sarah (news): Twin quasars found. p1179 9 Mar 1990.
Wilson, Samuel H. *See* Jeang, Kuan-Teh.
Wine, Jeffrey J. and Solc, Charles K.: Chloride channels in cystic fibrosis patients (technical comment). p222 12 Jan 1990.
Winkelmann, Gerd. *See* Heinrichs, Volker.
Winkler, Jay R. *See* Fox, Lucius S.
Winkler, John K., Jr.: DNA fingerprinting (letter). p1018 2 Mar 1990.
Wise, Kim S. *See* Rosengarten, Renate.
Wise, W. S. *See* Weisenhorn, A. L.
Witkowski, Colette M. *See* Trent, Jeffrey M.
Witkowski, Jan A.: Carrel's cultures (letter). p1385 23 Mar 1990.
Witte, Owen N. *See* Lugo, Tracy G.
Woese, Carl R.: Evolutionary questions: the "progenote" (letter). p789 16 Feb 1990.
Wolff, Jon A.; Malone, Robert W.; Williams, Phillip; Chong, Wang; Acsadi, Gyula; Jani, Agnes; Felgner, Philip L.: Direct gene transfer into mouse muscle in vivo. p1465 23 Mar 1990.
Wood, Warren W.; Kraemer, Thomas F.; Hearn, Paul P., Jr.: Intragranular diffusion: an important mechanism influencing solute transport in clastic aquifers? p1569 30 Mar 1990.
Woodland, David; Happ, Mary Pat; Bill, Jerome; Palmer, Ed: Requirement for cotolerogenic gene products in the clonal deletion of I-E reactive T cells. p958 23 Feb 1990.
Wright, Kenneth L. *See* Holthuis, Joost.
Wu, X. D. *See* Ramesh, R.

X–Z

Xiang, Xin; Benson, Kathleen F.; Chada, Kiran: Mini-mouse: disruption of the pygmy locus in a transgenic insertional mutant. p967 23 Feb 1990.
Xu, Hao-Peng. *See* Field, Jeffrey.
Yahara, Ichiro. *See* Itoh, Naoto.
Yamaizumi, Ziro. *See* Milburn, Michael V.
Yanagisawa, Masashi. *See* Yoshizawa, Toshihiro.
Yancopoulos, George D. *See* Maisonpierre, Peter C.
Yarbrough, Walter A. and Messier, Russell: Current issues and problems in the chemical vapor deposition of diamond. p688 9 Feb 1990.
Yewdell, Jonathan W. *See* Cox, Josephine H.
Yonehara, Shin. *See* Itoh, Naoto.
Yoshizawa, Toshihiro; Shinmi, Osamu; Giaid, Adel; Yanagisawa, Masashi; Gibson, Sally J.; Kimura, Sadao; Uchiyama, Yasuo; Polak, Julia M.; Masaki, Tomoh; Kanazawa, Ichiro: Endothelin: a novel peptide in the posterior pituitary system. p462 26 Jan 1990.
Young, Donald C. *See* Moldowan, J. Michael.
Young, LaVonne M. *See* Reyes, Gregory R.
Zaia, John A. *See* Sarver, Nava.
Zeleznik-Le, Nancy J. *See* Liou, Hsiou-Chi.